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### Study of the problem of drop-outs of four junior high schools of Duluth

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A STUDY  
of the  
PROBLEM OF DROI-OUTS  
of  
FOUR JUNIOR HIGH SCHOOLS OF DULUTH  
by

ARNE J. BERGUM  
B. A. St. Olaf College 1915

Presented in Partial Fulfillment of the  
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Master of Arts  
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1938

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### Acknowledgments

In the hope that this study may provide impartial and objective evidence to facilitate more reliable prediction of withdrawing tendencies and appropriate guidance for junior high school pupils, this thesis is submitted. The writer wishes to acknowledge his indebtedness and to express his appreciation to all those who have aided the writer in this study, especially; Dr. W. R. Ames, Professor of Education, University of Montana, for his helpful guidance in the preparation of this thesis; Dr. H. H. Zelkema, Superintendent, J. B. Wiener, Assistant Superintendent, Nellie Feetham, Supervisor of Special Classes, A. B. Horowitz, City Planning Engineer, all of Duluth, for their generous cooperation in supplying statistical data for this thesis.

## THE BRIDGE BUILDER

An old man going a lone highway  
Came in the evening cold and gray  
To a chasm vast and wide,  
The old man crossed in the twilight dim,  
The sullen stream had no fear for him,  
But he stopped when safe on the other side  
And built a bridge to span the tide.

"Old man," said a fellow pilgrim near,  
"You're wasting your strength with building here,  
Your journey will end with the ending day,  
You never again will pass this way,  
You've crossed the chasm deep and wide  
Why build you this bridge at evening tide?"

The builder lifted his old gray head,  
"Good friend, in the path I have come," he said,  
There followeth after me today  
A youth whose feet must pass this way.  
This chasm which has been naught to me,  
To that fair haired youth might a pitfall be.  
He, too, must cross in the twilight dim,  
Good friend, I am building the bridge for him."

-Unknown-

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CHAPTER I  
GENERAL PURPOSE AND PLAN

Introduction

The high pupil mortality in the seventh, eighth and ninth grades has been a matter of grave concern to the educators of this country for half a century or more. During the first decade of the twentieth century, several investigations were carried on to determine the extent to which elimination occurred in the different parts of the country.

Most pertinent of these investigations were those individually conducted by Ayres, Thorndike and Strayer. For the sake of brevity the results of their investigations are summarized below:

TABLE I

Results of Three Investigations of Drop-outs in  
Grades VII, VIII and First Year High School, by  
Ayres, Thorndike and Strayer.<sup>1</sup>

Author	Year	No. of Cities Investigated	Grade VII	Grade VIII	First Yr. High
Ayres	1905	58	30%	50%	60%
Thorndike	1907	23	46%	60%	73%
Strayer	1911	319	37%	49%	61%

Table I gives a summary of three of the earliest comprehensive studies of the problem of drop-outs in the grades seven, eight and first year high school. These grades are

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1. Pringle, R. W., The Junior High School, McGraw Hill Company, 1937, p. 3.

designated in this way, as the schools of that decade were still using the eight grade elementary school and the four year high school plan.

The close agreement in drop-outs for each of the three grades covered by these three separate investigations gives ample evidence of the wide-spread distribution and the gravity of the problem at that time. It was from the result of these studies that the general public became first aware of the great mortality and social wastage going on in our schools.

In 1910 the Committee on Education of the Minneapolis Chamber of Commerce, after making an extensive study of the whole question of reorganization of the Minneapolis School System, placed first among its ten reasons for establishing the Junior High School system, "a thousand pupils drop out of school during or at the end of the eighth grade and another thousand drop out during or at the end of the ninth grade..... If this combined army of two thousand children who now leave school every year prepared to do nothing in particular could be given a unified course under one roof beginning at the seventh grade, the effect would be:

a) to hold in school through the ninth grade, many of those who now leave during or at the end of the eighth grade and

b) to give them all a far more valuable preparation for practical life than is now possible."<sup>2</sup>

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2. Bunker, Frank, The Junior High School Movement, W. F. Roberts Company, 1935, p. 236.

Leonard Koos<sup>3</sup> in a study to determine the "peculiar functions of the junior high school" canvassed more than 200 school systems. The data gathered was then divided into two classes: 1) statements made by educational leaders, 2) data in public school documents. Retention of pupils was given a frequency rating of 90 per cent by educational leaders and 73.3 per cent in public school documents. Some of the aims and objectives as stated in the study and classified under retention are:

1. "To reduce to a minimum the elimination of pupils.
2. To facilitate the continuation of every child's education.
3. To keep a larger number of pupils in school for another year.
4. To bridge the gap between the eighth and the ninth grades in the traditional organization.
5. To render smoother the transition from elementary to secondary education."<sup>4</sup>

The foregoing brings to a focus the wide recognition of the problem of pupil mortality and its influence upon the establishment of the Junior High School system. To what extent the junior high school has met the above purposes and its inherent possibilities of further increasing its holding power are the challenging objectives of the study.

The city of Duluth, Minnesota joined the junior high school movement in 1913 when the Washington Junior High School, the first of six junior high schools, was organized. Prior to that date the traditional eight grade elementary school and the four year high school were used throughout the city.

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3. Koos, L. V., The Junior High School, Ginn and Company, 1927, p. 17.

4. Ibid, p. 18.

TABLE II

Comparison of Drop-outs Before and After the Duluth Junior High Schools were Organized.

Year	Grade 7	Grade 8	Total Drop-outs	Enroll- ment	Per cent
1912	125	138	263	2202	11.94
1937	114	134	248	3346	7.41

Table II furnishes data showing the relative number of drop-outs from the seventh and eighth grades, before and after the junior high schools were organized in the city. Out of a total enrollment of 2202 pupils, 263 (11.94 per cent) dropped out in the school year 1911-12. At the close of the school year 1936-37, just twenty-five years later, under the operation of the junior high school, 248 (7.41 per cent) out of an enrollment of 3346 had withdrawn from these grades, showing a gain of 4.53 per cent of the total number enrolled.

While this improved holding power under the junior high school is clearly evident, it must be admitted that the trend toward greater retention has also been evident in all types of school organizations and that some of the pupils that are staying on today may also have continued for a longer period in the traditional elementary school organization. On the other hand the opportunities for exploration and guidance, the recognition of individual difference, and the efforts made to meet these differences in the junior high school have to some extent reduced the number of withdrawals or prolonged the stay of many potential drop-outs.

Notwithstanding the great progress that has been made, it is also evident that there is still too high a pupil mortality

in the seventh, eighth and ninth grades. In this day and age when employment for juveniles has become exceedingly infrequent, educators are still faced with the challenge of further reducing the number. This has not only an educational and economic aspect but a sociological one as well. These early leavers become potential loafers or criminals, who, because of lack of interest in school or lack of employment out of school, have no other alternative.

In a brief study of drop-outs for the years 1930-1936, (Table IV, page 12) conducted by the Superintendent of Schools covering all the junior high schools of Duluth, facts and figures were exposed revealing the enormous leakage in the seventh, eighth, and ninth grades. Among the questions raised by the superintendent in connection with this study were: "What are the probable reasons for pupils dropping out of our junior high schools? Is it the lack of interest on the part of our fourteen through eighteen year-olds in the education we are offering them? Do we have a substantial number of pupils of just average intelligence or lower who wish to attend school but for whom the schools as they now are organized, do not function in such a way that they can cope with the problems with which these pupils are presented?"<sup>5</sup> These questions challenged the attention of the writer of this thesis and awakened a desire to seek the answer.

When in the fall of 1937 the writer was transferred from

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5. Report of the Superintendent of Schools to the Duluth Board of Education, Dec. 22, 1936. "A Study of Junior High School Enrollments." p. 4. Unpublished.

the principalship of West Junior High School where drop-outs were normal to the principalship of Washington Junior High School where the ratio of drop-outs was twice as great, the problem assumed new interest. Because of the rapidly declining opportunities for employment, and the consequent increase in idleness and juvenile delinquency on the part of those dropping out of school, the increased responsibility of the schools became more and more apparent. In the light of the above, this study was undertaken not only as an administrative challenge, but as a basis for this thesis.

### The Problem

The purpose of this study is fourfold:

1. To ascertain the causes of withdrawals from four selected and representative Junior High Schools of Duluth, Minnesota.
2. To furnish data relative to intelligence, scholarship, age, grade, behavior and socio-economic status of pupils who withdrew and those who remain.
3. To compare the data of the two groups for the purpose of discovering evidence that may be used in forecasting withdrawals.
4. To propose remedies in the light of these findings by means of which helpful guidance may be given pupils with withdrawing tendencies to the end that their continuance in school may be extended.



## The Basic Data of the Study

Pupils included: Withdrawal Group A, Retained Group B.

Intensive study has been given to two groups. Group A is limited to pupils withdrawing from four junior high schools during the school year 1937-38 from the grades seven, eight, and nine. This group includes all drop-outs irrespective of cause. Causes of drop-outs over which the school authorities have no control will be given little consideration, while the major emphasis will be given to causes where remedial action may have weight. Of the 271 pupils making up this group 140 are boys and 131 are girls.

Group B is made up of 400 pupils from the 9A classes of the four junior high schools. One hundred 9A pupils were selected at random from each of the four schools and represent fair sampling of the 1050 graduating 9A's as to intelligence, school progress, home background, and culture.

The junior high schools chosen for this study are East, Washington, Lincoln, and West. As these schools have about the same enrollment and are representative of the city's school population in regard to industrial and residential distribution, nationality, occupational level of parents, educational background and wealth, they give a cross section of the city as a whole, giving full range of social and mental levels. With these factors in common, it will be possible to make comparisons and point out peculiarities or pertinent differences.

It will be well at this point to get a panoramic picture of the four junior high schools and their respective districts. It will then be possible to better interpret the data and findings subsequently given.

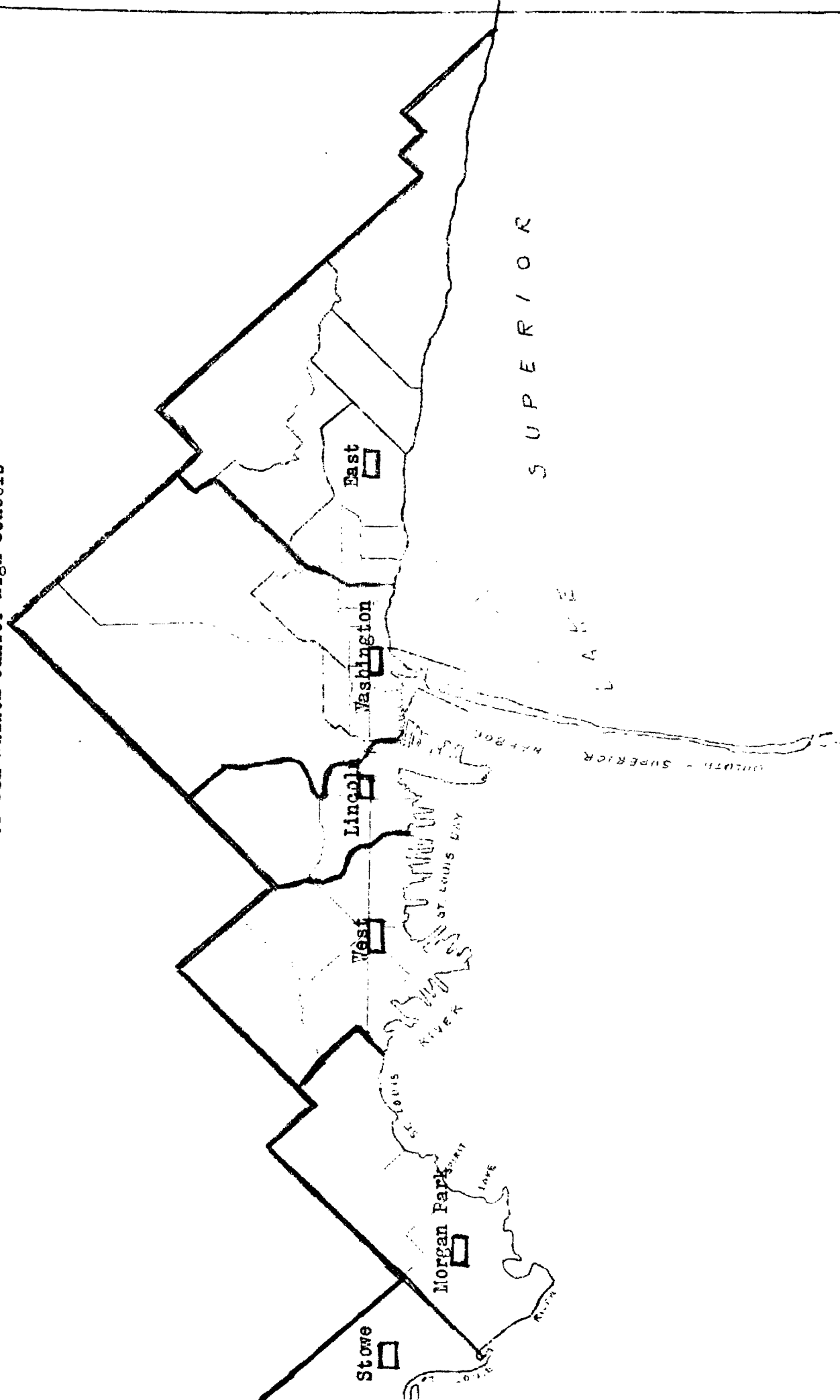
Duluth, a city of 105,000 population, is built along the shoreline of Lake Superior and the north bank of the St. Louis river. It represents an elongated area twenty miles long and from three to five miles wide. The school districts run laterally from one end of the city to the other as noted in Figure 1. Duluth may be considered a typical American city of the 100,000 population class. Likewise, the four junior high schools may be considered typical of the junior high schools of the country with an average enrollment of 1000 pupils. The school districts included in this study contain all the strata of society from the highest to the lowest level.

Beginning at the eastern end of the city, East Junior High School, with an enrollment of 1184 pupils, is located in the most exclusive residential area. Its population is a heterogeneous mixture of nationalities, none of which predominate. Except for a few suburbs contributing to this district, it represents the better class of homes of the elite, wealthy, and perhaps, highest cultured of the four districts.

Adjoining East is the Washington Junior district, the "down town" junior high. Being only three blocks from the heart of the business section, it has a typical metropolitan location. In this area are located the main retail and whole-

Figure 1

Location of Six Duluth Junior High Schools



sale concerns, shipping wharves, warehouses, commission houses, railway terminals, and some of the grain elevators. Naturally into this vicinity, there would gravitate the largest part of the city's floating population. With an enrollment of 1243 pupils in this metropolitan surrounding, the problem of withdrawals becomes a challenging one.

Next geographically lies the Lincoln Junior High School district. This is a compact residential area made up chiefly of middle and working classes of people of which the Scandinavians and Polish nationalities predominate. A number of small industries, coal and ore docks, railway terminals, railway yards and roundhouses furnish the employment opportunities. Lincoln with a school population of 844 is the smallest of the four schools studied.

West Junior High School, with an enrollment of 979 pupils, is located in one of the most distinctly industrial areas. Situated five miles from the "down town" business center, it has all the aspects of a separate community with its own business and industrial areas. This district, is also largely Scandinavian, however, one large section is made up of the Southern European stock of the type that usually locates near steel industries. The rest of the district would probably represent all strata from the lowest to the highest.

TABLE III

Withdrawals from Minneapolis Junior High Schools-  
1932-1937.<sup>6</sup>

School Year	1932-33	1933-34	1934-35	1935-36	1936-37
Number enrolled	14,323	15,097	15,867	16,050	15,668
Dropped-out	1,263	1,341	1,404	1,385	1,437
Percentage of Drop-outs	8.70	8.89	8.85	8.69	9.17

Table III furnishes data giving the number and percentage of withdrawals from the Minneapolis Junior High Schools over a period of five years. It is of interest to note the close correlation between the percentage of drop-outs of Duluth and those of Minneapolis. Over the five year period, 1933-1937 inclusive (Tables III and IV), the Duluth Junior High Schools showed an average of 7.8 per cent while the Minneapolis average percentage for the same period of years was 8.86 or a difference of 1.06 per cent.

Table IV furnished data referred to on page 8. Figures for the school year 1937-38 have been added to the original study, giving the rate of elimination over a period of nine years beginning in 1930 and concluding June 1938. Out of a total enrollment of 4247 in 1930, there was a steady increase to 4674 in 1938, a gain of 427 pupils or 9.9 per cent. In 1930 there were 167 more girls than boys in the six Junior High Schools of Duluth. Figures for June 1938 show this difference had been cut down to 102. It is also of interest to note that

6. Letter from the Office of the Minneapolis Superintendent of Schools, March 15, 1938.

TABLE IV

Drop-outs from Six Duluth Public Junior High Schools, 1930-38 Inclusive.									
Year	Junior High Enrollment		Number of Withdrawals		Per cent of Withdrawals		Total Enrollment	Total Withdrawals	Per cent of Withdrawals
	Boys	Girls	Boys	Girls	Boys	Girls			
1930	2090	2157	248	223	11.87	10.34	4247	471	11.10
1931	2168	2196	200	177	9.23	8.06	4364	377	8.64
1932	2217	2166	232	143	10.46	6.60	4383	375	8.56
1933	2297	2178	195	147	8.49	6.75	4475	342	7.64
1934	2256	2149	195	152	8.64	7.07	4405	347	7.88
1935	2392	2266	209	146	8.74	6.44	4658	355	7.62
1936	2324	2310	208	171	8.95	7.40	4634	379	8.18
1937	2416	2329	219	146	9.06	6.26	4745	365	7.69
1938	2388	2286	158	141	6.61	6.17	4674	303	6.26
Average	2283	2226	207	161	9.12	7.23	4509	368	8.17

during the nine years there was an increase of 298 boys and 129 girls. This is in line with the tremendous growth of secondary schools throughout the nation since the beginning of the depression. Of greatest importance is the increasing number of boys continuing in school.

The number of drop-outs in 1930 was 471 or 11.1 per cent of the total enrollment. Of this number 223 were girls and 248 were boys. The June 1931 figures indicate a decrease in the number of withdrawals to 377, probably due to the fact that the depression had reduced the number of available jobs thereby removing from some, at least, the temptation to leave school to seek employment. After 1931 the number eliminated remained the same with an average of 375 boys and girls.

The figures for June 1938 indicate a very perceptible drop in the number of withdrawals, establishing a new low mark of 303. The greatest proportion of these occurred among the boys, which showed a decrease of 61, or 27 per cent during the school year 1937-38. The girls on the other hand show a decrease of only 5, or 2.5 per cent. Whether this is a new trend or merely an exceptional year, it is an indication of the possibility of reducing the number leaving junior high school for reasons over which the school authorities may have some control.

It is evident that the pupil who has left the jurisdiction of the school cannot, as a rule, be aided by the school authorities. As long as the pupil remains in school, there is always the possibility that guidance, encouragement, and curriculum adjustment may prevent, or at least, delay his or her

premature withdrawal from school. It is obvious then, whatever effort is to be made in salvaging potential early-leavers, must be done while they are still in school.

### Summary

This chapter has set forth the nationwide recognition of the problem of drop-outs in grades seven, eight, and nine, known as the junior high school; the scope and gravity of the local situation demanding further investigation; and the four-fold purpose of the writer in making this study. Subsequent chapters will give an analysis of the factors contributing to elimination and possible remedies.



## CHAPTER II

### SCHOOL PROGRESS AND RETENTION

#### Retardation, Acceleration and Normal Age

Reference has been made, in the preceding pages, to the relationship between school progress and continuation in school. In this chapter studies are offered comparing the retained and withdrawing groups as to intelligence ratings, scholastic achievement, age, grades attained, attendance and conduct, to determine how these factors affect retention or elimination.

TABLE V

Study of Eight Junior High Schools, of Los Angeles,  
1920-21, Using Terman Group Test of Mental Ability,  
Given to 7439 Pupils.<sup>7</sup>

Grades	Very Superior	Superior	High Average	Average	Low Average	Inferior
Seven	2	8	23	42	21	4
Eight	7	19	31	31	10	2
Nine	14	25	34	22	4	1

In the above study it will be noted that the percentages for each of the three grades approximate a normal distribution, but that the level of intelligence increases from year to year as indicated by the increasing percentages above the average in the eighth over the seventh and in the ninth over the eighth. This selective character of the secondary school

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7. Pringle, Op. cit., p. 36.

population would hold true to an even greater extent in the tenth, eleventh, and twelfth grades, as the pupils withdrew because of the increasingly difficult school work in the higher grades. It is, therefore, evident that school progress through the years of the secondary school has been a process to a large extent of the survival of the most intelligent.

Several questions naturally arise. Were the pupils who dropped out of our schools in the seventh, eighth and ninth grades, misfits, dullards, and maladjusted? Further, if the drop-outs were of the lower mental calibre, wherein have our schools failed to meet the needs of this group to the extent that they could find satisfaction in continuing their school progress?

Brooks states that the chances of a pupil being eliminated during the first years of junior high school seem to be four times as great if he is among the lowest thirty per cent in intelligence as he would be if he were in the top thirty per cent in intelligence. He concludes, "the greatest amount of withdrawal is likely to be found among pupils who possess smaller amounts of abilities measured by existing mental tests."<sup>8</sup>

Table VI shows the status of school progress made by the seventh, eighth and ninth grades from 1930 to 1935 inclusive. Figures beyond 1935 cannot be used in this table because of

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8. Brooks, Fowler D., The Psychology of Adolescence, The Houghton Mifflin Company, 1929, p. 550.

TABLE VI

Percentage of Distribution of Retarded, Normal and Accelerated Pupils, for Years 1930 to 1935 Inclusive, Grades Seven, Eight, and Nine of Duluth.

## Grade 7

Year	Over-age		Normal		Under-age	
	Boys	Girls	Boys	Girls	Boys	Girls
1930	36.5	24.2	61.0	70.7	3.0	5.1
1931	31.2	22.0	67.3	77.5	1.5	3.4
1932	36.0	21.8	61.0	74.3	3.1	3.9
1933	31.2	17.5	60.0	78.6	9.0	3.9
1934	26.5	16.0	70.1	79.5	3.4	4.5
1935	28.7	16.2	67.4	80.1	3.9	3.7
Average	31.7	19.6	64.4	77.3	3.9	4.1

## Grade 8

Year	Over-age		Normal		Under-age	
	Boys	Girls	Boys	Girls	Boys	Girls
1930	36.0	28.4	61.2	65.8	2.8	5.8
1931	36.0	22.0	60.8	74.2	3.2	3.8
1932	31.8	20.0	66.5	75.8	1.7	4.2
1933	37.2	24.7	59.8	71.1	3.0	4.2
1934	30.0	18.0	67.7	78.1	2.3	3.9
1935	26.3	16.4	68.5	78.8	3.2	4.8
Average	33.2	21.6	64.1	73.2	2.7	4.4

TABLE VI Cont'd

Grade 9						
Year	Over-age		Normal		Under-age	
	Boys	Girls	Boys	Girls	Boys	Girls
1930	29.0	23.0	67.5	73.5	3.5	4.6
1931	34.7	22.7	62.4	71.1	2.9	6.2
1932	36.7	21.5	61.1	74.1	2.2	4.4
1933	34.0	22.0	63.9	74.7	2.1	3.3
1934	34.0	36.0	60.6	58.3	5.4	5.7
1935	31.1	16.4	65.3	78.1	2.6	5.5
Average	33.2	23.6	63.6	71.6	3.1	4.9

TABLE VII

Summary of Retarded, Normal and Accelerated Pupils  
of Duluth Junior High Schools, 1930-1935.

	Boys		Girls		Totals	
	Number	Per cent	Number	Per cent	Number	Per cent
Overage	820	32.7	525	21.6	1345	27.1
Normal	1607	64.1	1798	74.0	3405	69.1
Underage	80	3.2	107	4.4	187	3.8
Totals	2507	100.0	2430	100.0	4937	100.0

a change made in the method of computing the age and grade reports. However, as the data appear to be so consistent during the six previous years, it is reasonable to expect that there would be no great variation in the results for the years 1936 to 1938.

It will be noted that a greater percentage of girls was accelerated in each of the three grades. Conversely the boys had a larger percentage of retardation which was characteristic of each of the three grades. Studies show that the percentage of acceleration should be about the same as that of retardation. However, it does not appear to work out that way in practice. It is easier to drop behind than to advance ahead of one's grade and once behind, very few make up the deficiency.

On the other hand the junior high schools, as organized today, seldom advance pupils beyond their grade. The superior ability and energy of students are usually absorbed by an enrichment-curriculum and by extra-curriculum activities. This perhaps accounts for the small number of accelerated pupils in the Duluth Junior High Schools, the ones accelerated having been doubly-promoted in the elementary grades.

Table VII summarizes the data given in the preceding table adding figures regarding the numbers involved. It is evident that the girls lead the boys consistently in their school progress. This is shown by the larger percentage of normal and accelerated and the consequent lower percentage of retarded. This explains also why there is a larger number of boys (191

more boys than girls) in the three grades, since a greater number of boys are retarded and have failed to go on into Senior High School with their class.

In a study made by A. A. Douglas, the statement is made, "Some results from group intelligence tests show the average scores for girls to be several points lower than the average scores for boys."<sup>9</sup> He concludes that greater persistence in school by girls cannot be explained by the available data, on the grounds of their superior intelligence.

Fowler Brooks in his extensive study of retardation states that "approximately one third of the adolescents attending school are retarded."<sup>10</sup> He bases his claims on a study made of over 3,000,000 pupils in 830 cities of the United States having a population of more than 25,000.

TABLE VIII

Percentage of Adolescents whose Grade Classification is Normal, Retarded and Accelerated in 830 cities of the United States having a population of 25,000 or more.<sup>11</sup>

Age	Normal	Retarded			Total plus average	Accelerated		
		1 yr.	2 yrs.	3 yrs.		1 yr.	2 yrs.	Total plus average
13	53.4	18.4	10.1	6.2	34.7	10.5	14.0	11.9
14	53.9	17.6	10.4	6.3	36.3	8.4	1.4	9.8
15	54.6	17.3	9.6	9.1	36.0	8.0	1.4	9.4
16	54.9	20.5	8.0	6.5	34.8	10.3	0.0	10.3
17	65.9	20.2	9.9	4.0	34.1			

9. Douglas, A. A., Secondary Education, The Houghton Mifflin Company, 1927, p. 248.

10. Brooks, Op. cit., p. 9.

11. Ibid, p. 9.

In Table VIII Brooks shows an average of 56.5 per cent of the adolescents were of normal grade, 35.2 per cent retarded, and 10.3 per cent accelerated. The situation in Duluth approximates the nationwide scale set up by Brooks. While his study reveals an average of 56.5 per cent of the boys and girls of the junior high school level are of normal age, Duluth figures show an average of 68.2 per cent. Likewise, the Duluth retarded group (27.1 per cent) is less than that for the country at large. Table VIII reveals the average acceleration as 10.3 per cent, as compared with 3.8 per cent acceleration in Duluth. As stated above this may be due to the particular philosophy of the Duluth school system in regard to double promotion or acceleration.

The idea of rigid standards of accomplishment for promotion has in recent years moderated in favor of those less able, making it possible for greater numbers to go on. This is predicated upon the philosophy that pupils doing the very best they can with the mental ability they have do not profit by repeated failures. In fact, the damage to their personalities exceed the added content or skills acquired. This philosophy would naturally increase the percentage of the normal group and reduce the retarded. There is also the tendency for many to attend summer school to remove failures and regain lost ground.

TABLE IX

Number and Percentage of Boys and Girls of the Withdrawing Group who were Underaged, Normal or Overaged of Four Duluth Junior High Schools During 1937-1938.

Age	Boys		Girls		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Underage	2	2.5			2	2.5
Normal	8	12.0	9	11.0	17	11.5
Overaged one year	19	28.5	25	29.0	42	28.7
Two years	20	30.0	27	35.0	47	32.5
Three years or more	18	27.0	19	25.0	37	26.0
Total	67	100.0	78	100.0	145	100.0

Figures in Table IX represent only withdrawn pupils over which the school may have had some measure of control. Figures relating to pupils having moved from the city, transferred to other schools, or left because of illness, are not used in this or succeeding tables. However, pupils often offer transfer to other schools, or illness as reasons for leaving school, when in reality these reasons are merely a cloak to cover up some maladjustment. Frequently pupils will offer illness as their reason for leaving school, when the actual reason is failure to do the prescribed school work. Likewise, should there be a private or parochial school near by, a pupil may transfer when in difficulty with some teacher or the school authorities. In this and the studies that follow, an attempt is made to ascertain the actual status of pupils leaving school because of lack of interest, seeking



employment, discipline or home conditions.

Table IX reveals that 87.2 per cent of all the drop-outs have been retarded one, two or three years, with the boys and girls about evenly divided. This is over two times as many retarded as found by Brooks (Table VIII) in his nationwide study of pupils in school. Further, the normal pupils of the drop-out group, represent only one fifth of the normal pupils in Brooks study. The two boys represented as accelerated had more mentality than the rest, but did not have a proportionate amount of emotional control. Their leaving was due to coming into conflict with the law.

Retardation being a common factor in five sixths of all of the drop-outs in this study, can well be accepted as a major evidence of withdrawal.

TABLE X

Number and Percentage of Boys and Girls of Retained Group Who Were Underaged, of Normal Age and Overaged, of Four Duluth Junior High Schools, 1937-1938.

Age	Boys		Girls		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Underage	18	9.0	16	8.0	34	8.5
Normal age	110	55.0	124	62.0	234	58.5
Overage	72	36.0	60	30.0	132	33.0
Total	200	100.0	200	100.0	400	100.0

Table X reveals that 58.5 per cent of all the pupils of the retained group have made normal progress through the elementary and junior high school while 8.5 per cent were accelerated one year or more. This would appear to be more favorable than the findings in Table VIII (page 20) which shows an

average of 56.5 per cent of normal progress, while an average of 10.3 per cent were accelerated. Brooks' study further shows an average of 35.2 per cent retarded as compared with 33 per cent for this retained group. This is a reasonable conclusion in view of the fact that this retained group represents a select group completing the ninth grade, and from which many retarded pupils have been eliminated, while Brooks' study takes into consideration all fourteen and fifteen year olds in school, irrespective of their grade advancement. One might also conclude from this comparison that the rigid passing requirements of previous years have been modified so that the pupil's progress might be commensurate with his ability. This would result in fewer failures, and less retardation. Summer school opportunities for make-up and remedial work may also have raised the percentage of the normal and accelerated pupils of this group.

TABLE XI

Age of Withdrawals of Four Duluth Junior High Schools,  
1937-1938.

Age	Boys Percent	Girls Percent	Total Percent
14	9.0	5.0	7.0
15	21.0	18.0	19.5
16	44.0	42.0	43.0
17	14.0	32.0	23.0
18	12.0	3.0	7.5
Total	100.0	100.0	100.0

The data in Table XI definitely places the age 16 as the peak age for the boys and girls who drop out of school. The Minnesota Compulsory Attendance Law states that all pupils must attend until their sixteenth birthday unless by written request they have been excused by school authorities. That age 16 is a welcome age to many boys who find little interest in school is evident by the great number who leave upon reaching that age. However, 30 per cent have already left school before the age 16. While the Attendance Law states that pupils must remain in school until the age of 16, still there has prevailed the practice in some parts of the state that pupils completing the eighth grade had satisfied the state requirements. Due to this practice there has been some leniency shown those who desired to leave before the age 16 but who had completed the eighth grade. On the other hand, most of those who have completed the eighth grade before they have reached the age 16, have made normal progress in school and the reasons for their leaving have been reasons other than retardation or low mentality.

While there is a definite trend for boys and girls to continue longer in school than formerly due to the lack of employment opportunities, it is extremely doubtful, even with improved economic conditions, that this trend will cease or be reversed. With the prospect of age 18 as the compulsory attendance age in the near future, it is evident that the schools must revise their curriculums to provide for these retarded and low mentally, a curricula commensurate with their abilities, challenging to their interests and suitable to their

future needs.

TABLE XII

Grades Attained at Time of Withdrawal by Pupils of  
Four Duluth Junior High Schools During 1937-1938.

Grade	Boys		Girls		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
9	46	68.6	44	56.4	90	62.0
8	14	20.8	18	23.0	32	22.0
7	7	10.6	16	20.6	23	16.0
Total	67	100.0	78	100.0	145	100.0

Table XII indicates that 62 per cent of elimination takes place in the ninth grade. This is almost three times as many as the number leaving the eighth grade and almost 3.5 times the number withdrawing from the seventh grade. From the standpoint of age and school progress this is a natural procedure. Pupils making normal progress enter the ninth grade at 14. Pupils retarded one or two years would reach the ninth grade during their sixteenth year. As the Compulsory Attendance Law permits them to leave at the age of 16, it is to be expected that of the pupils with withdrawing tendencies, the greatest number will leave at this point.

In considering Table XI in connection with Table XII it is evident that age 16 is the major determining factor in elimination rather than the grade. When pupils reach the age of 16 they are most likely to leave irrespective of grade.

TABLE XIII

Distribution of the Intelligence Ratings of 145  
 Withdrawing and 400 Retained Pupils of Four Duluth  
 Junior High Schools, 1937-1938.

Intelligence Quotient	Withdrawals Per cent	Retained Per cent
120 or over	0.0	6.2
110-119	5.5	18.8
90-109	40.8	59.8
80-89	41.2	13.0
Below 80	11.5	2.2
Total	100.0	100.0

Table XIII indicates that there has been a certain amount of selectivity in the retained group as evidenced by the 25 per cent who had intelligence quotients above the general average and only 15.2 per cent below. On the other hand of the withdrawing group only 5.5 had an I. Q. above the general average and 53 per cent were below average in native intelligence as measured by the Kuhlmann-Anderson Intelligence Tests. In other words there are almost four times as many below average in the eliminated group as in the retained. This indicates a definite survival of the more intelligent in the retained group and establishes low mentality as one of the factors that must be considered among the causes of drop-outs.

TABLE XIV

Relative Number and Percentage of Withdrawing and Retained Groups of Four Duluth Junior High Schools According to Their School Marks, 1937-1938.

School Mark	Withdrawals		Retained	
	Number	Per cent	Number	Per cent
A			22	5.50
B	3	2.50	113	28.25
C	39	27.50	184	46.00
D	69	47.00	73	18.25
F	34	23.00	8	2.00
Total	145	100.00	400	100.00

Figure 2

Comparison of School Marks Received by Withdrawing and Retained Groups of Four Duluth Junior High Schools, 1937-1938.

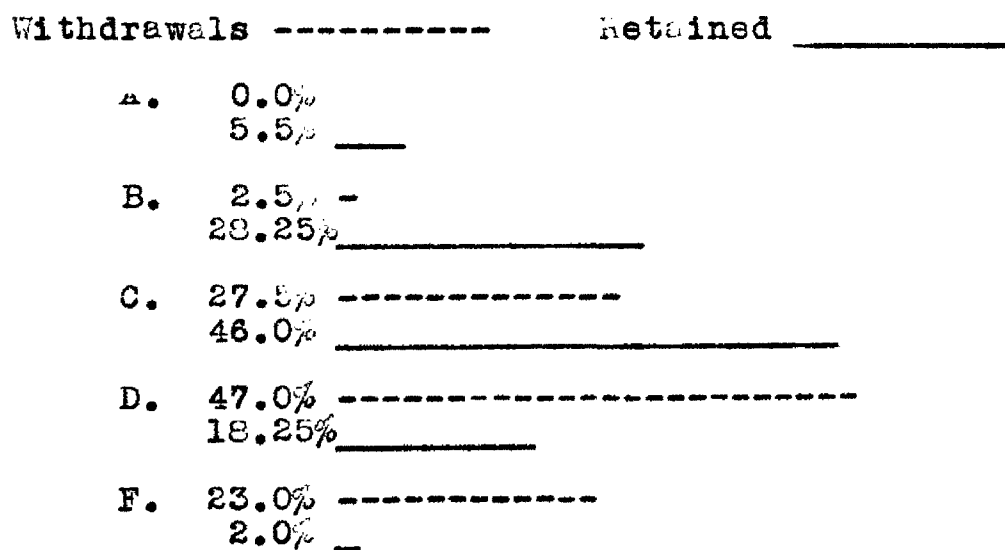


Table XIV and Figure 2 support previous data showing that the retained group rates several points higher in scholastic achievement than the withdrawing group. Of the retained pupils, 34 per cent were classified on the superior level

(A or B) while only 2.5 per cent of those eliminated reached that level. Of those who withdrew, who had attained a scholastic mark of B, one was a 14 year old boy who was forced to leave school in the ninth grade because of a grave home situation, the other two had been dismissed for disciplinary reasons.

Of the withdrawing pupils, 70 per cent had school marks below the general average (C) as compared with only 20.25 per cent of the retained pupils. While this shows almost 3.5 times as many below average, among the withdrawals, it also indicates that a large number persist in school in spite of low scholastic achievement. From this one may conclude that no definite type uniformly persists in school, nor does any definite type uniformly withdraw. Lack of ability to master the work as offered is apparently accountable for the elimination of a large number.

TABLE XV

Comparison of Intelligence Ratings With Scholastic Ratings of Withdrawing Pupils of Four Duluth Junior High Schools, 1937-1938.

I. Q.	Per cent	Scholastic Mark	Per cent
120 or over	0.0	A	0.0
110-119	5.5	B	2.5
90-109	40.5	C	27.5
80-89	41.5	D	41.5
Below 80	11.5	F	28.5
Total	100.0		100.0

TABLE XVI

Comparison of Intelligence Ratings With Scholastic  
Ratings of the Retained Group of Four Duluth Junior  
High Schools, 1937-1938.

I. Q.	Per cent	Scholastic Mark	Per cent
120 or over	6.2	A	5.50
110-119	18.8	B	28.25
90-109	59.8	C	46.00
80-89	13.0	D	18.25
Below 80	2.2	F	2.00
Total	100.0		100.00

That there is a high correlation between the I. Q. and attained scholarship in both the withdrawing and retained groups is evidenced in Tables XV and XVI. For the former group the median scholastic mark was D and the median I. Q. was 86. For the latter group, the median scholastic mark was C and the median I. Q. was 104. This comparatively high median for the retained pupils was to be expected inasmuch as they represent a selective group from which many of the lower mentally had been eliminated.



TABLE XVII

Attendance Record for Drop-outs in Four Duluth  
Junior High Schools For the Year in which Elimination Occurred, 1937-1938.

Days Absent	Boys Per cent	Girls Per cent	Total Per cent
0-10	18.0	20.0	19.0
11-20	30.0	35.0	32.5
21-30	34.0	30.0	32.0
31-40	8.0	5.0	6.5
Over 40	10.0	10.0	10.0
Total	100.0	100.0	100.0

Data from Table XVII do not furnish sufficient evidence to warrant a conclusion that absence from school for a shorter or longer period of time is, in itself, a predictable evidence of withdrawal. It is reasonable to suppose that pupils contemplating withdrawal from school care little whether they attend regularly or not. The policy followed in the Duluth Junior High Schools of making a thorough investigation of every case after the third day of absence does not leave an opportunity for prolonged absence without the school authorities' knowledge of the reason.

Frequent absences of a day or two at a time, do have an accumulative effect in retarding the school progress and may become a potent cause of withdrawal. Irregular attendance usually creates lack of interest, discouragement in school progress, failure of promotion which, in their cumulative effect, breed a desire to quit school as soon as the atten-

dance Law will permit. Table XVII indicates the range, 11 to 30 days absence, is found in 64 per cent of the cases of withdrawal. If any significance can be placed on the numbers of days absent, it will be found within those limits.

TABLE XVIII

Conduct Ratings for the Drop-outs and Retained Groups of Four Duluth Junior High Schools, 1937-1938.

Mark	Drop-outs Per cent	Retained Per cent
A	46.0	66.6
B	27.5	25.0
C	8.5	2.4
D	9.5	4.0
F	8.5	2.0
Total	100.0	100.0

Contrary to the general belief, the conduct or deportment marks were only slightly lower in each of the classifications, than the marks of the retained. While a low order of intelligence frequently goes hand in hand with obstreperous behavior, yet more often it is accompanied by timidity, shyness and an inferiority complex that produces docility. Too often pupils of this type will shut themselves off from those who would offer help and guidance. Persistent truancy, an evidence of lack of interest or dissatisfaction with school, frequently precedes withdrawal. Unless the conduct rating is lowered because of truancy, it appears from this study that conduct marks offer little that could be used in forecasting withdrawals.

## Summary

Chapter II has dealt with factors relating to mental endowments and school progress of the withdrawing and retained groups. More intensive study has been made of the pupils who left school for reasons over which the school authorities may have erred, or may have been negligent. Factors resulting from low intelligence were predominant among the causes of premature withdrawals from school. The following chapter will deal with the social and economic aspects of elimination.

## CHAPTER III

### SOCIO-ECONOMIC FACTORS

In the study thus far, evidence has been advanced showing that low mentality, retardation, and overageness, are factors contributing to withdrawal from junior high school, facts which have already been established in educational research. That these conditions are associated with withdrawal from the junior high schools of Duluth, Minnesota, as elsewhere, is the hypothesis of this thesis.

In chapter I, page 8, the four junior high schools of which this intensive study has been made, were described as to location, school population, industrial areas, social and cultural background. The four schools, East, Washington, Lincoln and West, were selected because of their comparable size and because they represented a fairly true cross section of the junior high school population of the city.

To ascertain the reasons for the wide variance in the numbers and ratio of withdrawals in these four junior high school districts, detailed studies have been made pointing out pertinent or predominating factors influencing retention or withdrawal in the respective districts.

In this chapter a comparative study of the schools will be made to determine the prevalence of certain social and economic factors and their relation to elimination or retention. These factors will be studied in the following order: causes of withdrawals, parental occupations, housing facilities, transiency of families, broken homes and juvenile delinquency.

## Comparison of the Four Junior High School Districts

TABLE XIX

Number and Percentage of Withdrawals in Relation to Enrollment in Four Junior High Schools of Duluth for the School Year Ending June 1938.

School	Number Belonging	Number of Withdrawals	Per cent of Withdrawals
West	978	44	4.49
East	1184	54	4.56
Lincoln	844	53	6.28
Washington	1243	120	9.65
Totals	4249	271	Average 6.37

Table XIX furnishes data showing the ratio of withdrawals to the enrollment of each of the four schools. The range of elimination varies from 4.49 per cent to 9.65 per cent. Relatively, Washington Junior High eliminates over twice as many as either West or East. Further analysis of this data appears in subsequent tables.

Table XX gives the distribution of drop-outs in the four Junior High Schools, selected for this study, covering a period of 9 years from 1930 to 1938 inclusive. Outstanding is the large number (120) and per cent (9.65) of withdrawals from Washington Junior High School. While it was generally expected that Washington would have the greatest withdrawal on the basis of the record of previous years, it was surprising to note that West had superseded East in reporting the smallest number (44). While there was a considerable drop in the number of withdrawals in all of the schools during the school year 1937-1938, it will be noted that the greatest



decrease occurred among the boys. At the close of the school year 1936-1937, 209 boys and 133 girls had dropped out. For the year ending June 1938 only 140 boys and 131 girls had left, which indicates a decrease of 69 boys and only 2 girls.

It is significant that there has been a gradual decrease in the number and ratio of withdrawals in each of the four schools during the past nine years. Washington Junior, however, shows the greatest percentage of reduction. With 14.86 per cent elimination in 1930, the 1938 figures show 9.65 per cent, a drop of 5.21 per cent. The other schools also show comparable decreases, Lincoln 4.38 per cent, East 4.30 per cent and West 4.27 per cent.

TABLE XXI

Classification of Causes of Withdrawal of 271 Pupils  
From the Four Junior High Schools of Duluth, 1937-  
1938.

School	Left City	Ill- ness	Trans- fer	Employ- ment	Lack of Interest	Disci- pline	Home Conditions
East	18	8	4	12	8	3	1
West	18	3	11	5	5	0	2
Lincoln	25	5	3	3	14	0	4
Washing- ton	33	23	13	20	24	0	7
Total Number	94	39	31	40	51	3	14
Per cent of Total	34.5	14.3	11.4	14.8	18.8	1.1	5.1

Table XXI furnishes information as to the reasons for leaving school according to the reports of the teachers and the investigating school officials. The reasons listed in-

clude all those over which the school authorities may have had some measure of control as well as those entirely beyond the control of the school. All have considerable significance in this study.

Consider first the total for each reason listed. To the 94 pupils who left the city, should be added the 31 transfers making a total of 125. This represents almost one half of the total. Unsettled economic conditions and the restless population resulting probably created this situation. This will be analyzed in detail on pp. 55-56. Lack of interest takes the next largest toll, 51. Included in this general classification will be such contributing reasons as, dislike for school, truancy, pupil-teacher conflict, repeated failure and overage. This offers, perhaps, the greatest challenge to the school officials interested in reducing the high pupil mortality. Lack of interest on the part of the withdrawing pupil must be considered as an admission of failure on the part of the present school set-up to interest boys and girls. Employment, which included 3 enrollees in the CCC took 40 pupils from the rolls. In spite of the Child Labor Laws and the general preference given adult workers, pupils will seek employment, perhaps not so much because of economic need at home, but for financial independence. If parents and pupils could see a financial gain in continuing school, in vocational classes for example, the offered "economic necessity excuse" would be greatly reduced. Until that goal has been reached, most of the 40 pupils listed under employment--(ostensibly economic necessity, in reality maladjustment)--will have to be



added to the 55 (lack of interest) and placed at the door-step of our present school system. Some conditions also cover a multitude of reasons for leaving such as poverty, death or illness of mother, disinterested parents. Frequently behind the reasons given, one will find some school dissatisfaction as the real basis.

In comparing the individual schools, Washington has the greatest number of withdrawals in each of the major classifications, with a total of 120. Being the "down town" school on the fringe of the main business area of the city, it naturally attracts a large share of the city's floating population which makes for a background conducive to heavy withdrawal. In the following reasons for drop-outs, leaving the city (33), transfer (13), employment (40) and lack of interest (28), Washington exceeds the other schools in number and relation to the total enrollment. Figures for East Junior indicates a heavy withdrawal under employment, when one considers the relatively stable economic level of that district.

#### Parental Occupation and Elimination

Next to the factors related to native intelligence, perhaps the most important group of factors that enter into the development of the child are those associated with its home. Without this information concerning the child's home environment, "the school cannot hope to play the part it should unless it takes as its starting point the kind of a home from which the child comes....The socio-economic status is such an important factor in the child's development that it should

become a part of the stock of data which the modern educator collects for the intelligent direction of education."<sup>12</sup>

No criteria has been set up to measure social, economic or cultural strata of any family, group or community with any degree of certainty. However, the occupation of the head of the family whether it be the father, the mother or one of the older children, determines to a very large extent the socio-economic status and influences the cultural level of the family.

A number of investigations have shown that most of the pupils who graduate from school, come from homes where the father's occupation is representative of the higher socio-economic levels. In a study conducted by Douglas and Wind of 418 withdrawing pupils from the Minneapolis Junior High Schools, it was found that most of the withdrawing pupils come from homes of the laboring classes. "Only 2 of the 178 children of the professional and higher executives, and 24 out of the 303 children of the commercial service workers and business proprietors, failed to remain through junior high, as compared with 258 of the 660 children of laborers included in this investigation."<sup>13</sup>

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12. Robbins, C. L., The School as a Social Institution, Allyn and Bacon Company, 1918, p. 94.

13. Douglass, E. R. and Wind, Kate, "Factors Related to Withdrawal from Junior High Schools in Minneapolis", in Elementary School Journal, Jan. 1937, p. 379.

TABLE AXII

Percentage Distribution, According to Classification of Sims Score Card for Socio-Economic Status, of Occupations of Fathers of Pupils in Three Achievement Groups of Northeast Junior High School, Kansas City, Missouri, 1935.<sup>14</sup>

Occupational Class	Success Group	Average Group	Failure Group
I. Professionals, higher executives	....	1.3	....
II. Commercial service, business proprietors	22.2	7.8	....
III. Artisan proprietors	33.3	2.6	11.1
IV. Skilled laborers, small shop owners	33.3	24.7	23.2
V. Unskilled laborers	11.1	63.6	66.7
Total	99.9	100.0	100.0

In a study of home status and success in school of three groups of students of the Northeast Junior High School, Kansas City, Mo. in 1935, using Sims Score Card as a measure, Table XXII reveals that two thirds of the failure group have fathers whose occupation is classified as unskilled laborers and almost nine tenths (88.9%) of this group are either from the unskilled or skilled classes. Only about one tenth (11.1%) of this group falls in class three, the middle class. It is evident that the greatest amount of elimination would also follow from this failure group since elimination follows failure to a very marked extent.

The average group shows the same preponderance (88.3%)

14. Collins, J. R., "Home Status and Success in School", The Elementary School Journal, October 1937, p. 110.

TABLE AXIII

Number and Percentage of Fathers of Withdrawing and Retained Groups of Four Duluth Junior High Schools Classified According to Sim's Classification of Occupations, 1937-1938.<sup>15</sup>

Occupations	Withdrawing Pupils		Retained pupils	
	Number	Per cent	Number	Per cent
I. Professional executives			32	8.0
II. Business proprietors			51	12.8
III. Artisan proprietors	38	14.0	96	24.0
IV. Skilled laborers	119	44.0	126	31.5
V. Unskilled laborers	114	42.0	95	23.7
Total	271	100.0	400	100.0

Figure 3

Comparison of Withdrawing and Retained Groups as to Occupations of Fathers.

Occupation of Father	Group	Per cent	----withdrawals ____retained
I. Professional	Withdrawals	0.0	
	Retained	8.0	_____
II. Business	Withdrawals	0.0	
	Retained	12.8	_____
III. Artisan	Withdrawals	14.0	-----
	Retained	24.0	_____
IV. Skilled	Withdrawals	44.0	-----
	Retained	31.5	_____
V. Unskilled	Withdrawals	42.0	-----
	Retained	23.7	_____

15. Sims, V. M., The Measure of Socio-Economic Status, p. 9. Public School Publishing Company, 1928.

in the two lowest occupational classes, while the success group show a preponderance (88.8%) in the three middle occupational classes. From the above it may be deduced that the cultural level resulting from the occupational class of the parent reflects to a very marked degree, the success or failure in school. Collins concludes, "If the father's occupation is considered as an index to the socio-economic status of the home, it would seem that pupils of the failing group are coming from homes which are socially, economically and educationally less favored than are those of the success group."<sup>16</sup> This conclusion is in line with the findings of the Duluth situation and studies made elsewhere.

Table XIII and Figure 3 give the distribution of occupations of fathers of the withdrawing and retained groups, using Sim's five-fold classification of occupations:<sup>17</sup>

- Class I. Doctors, lawyers, etc., executive manager, employing ten or more.
- II. Commercial service (stores, garages), large land owners, small business proprietors employing five or more.
- III. Artisan proprietors, petty officials, printing trade employees, skilled labor with some managerial responsibility and shop owners and business proprietors employing from one to five employees.
- IV. Skilled bakers, blacksmiths, building trades, chefs, cooks, firemen, policemen, sailors, railroad trades, waiters, small shop owners.

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16. Collins, Op. cit., p. 110

17. Sims, Op. cit., p. 9.

V. Unskilled, helpers, delivery men, furnace tenders, night watchmen, and all common labor.

The occupation of the father or the head of the household is, perhaps, the best single index in determining the economic resources, the leisure time and the cultural interests of the family, upon which the socio-economic status might be based.

Table XXIII shows that the junior high school does graduate pupils from all of the economic levels as represented by the occupations of the fathers. Of the 400 graduates, 20.8 per cent came from the two distinctly superior levels, whereas none of the withdrawals had fathers in classes I or II. No doubt the percentage of retained group in classes I and II would be greater, had the pupils who now go to private schools been included. In class II the retained pupils exceeded the withdrawing almost two to one.

All the girls who dropped out were from the skilled labor or common labor level, while 14 per cent of the boys dropping out were of class III. Apparently girls did not leave school until the economic pressure from home forced them to. Among the reasons given for withdrawal from school, "needed at home" seemed to be a common one among the girls.

That there is a definite relationship between the father's occupation and persistence in school is quite evident from these data. The income level of the family as indicated by the occupation of the father determines the cultural background, the social ambitions, the educational aspirations, and, to a certain extent, the interest manifested in school

continuance. All these factors woven into fabric of the child from the elementary grades up, have a lasting effect upon those from the upper socio-economic level. On the other hand a child with a background of scarcity and want, unable to dress according to the modest level of the average child, without the spending money of his more favored classmates, with older brothers or sisters who have previously dropped out, this possibility of leaving school at the earliest opportunity is an ever present suggestion.

TABLE XIIV

Comparison of Occupations of Fathers of Withdrawing  
and Retained Groups of Four Duluth Junior High  
Schools, 1937-1938.

Occupation of father	School	Withdrawals Per cent	Retained Per cent
I. Professional executives	East	00.0	18.0
	Washington	00.0	1.0
	Lincoln	00.0	2.0
	West	00.0	3.0
II. Business proprietors	East	00.0	19.0
	Washington	00.0	11.0
	Lincoln	00.0	3.0
	West	00.0	8.0
III. Artisan proprietors	East	25.8	23.0
	Washington	10.8	22.0
	Lincoln	15.1	12.0
	West	14.2	29.0
IV. Skilled laborers	East	44.6	24.0
	Washington	49.2	46.0
	Lincoln	39.7	48.0
	West	43.8	35.0
V. Unskilled	East	29.6	16.0
	Washington	40.0	20.0
	Lincoln	45.2	35.0
	West	42.0	25.0

Table XXIV furnishes data showing the relation between the occupation of the father and the extent of elimination or retention in the two groups of each of the four schools. It will be noted that none of the withdrawing pupils had fathers coming within the two highest occupational classifications. Of the retained pupils, East Junior had 37 per cent of this group having fathers in the professional or larger business classifications. The other three schools had comparatively few in these two upper brackets. In the skilled and unskilled labor groups, however, these three schools had approximately 85 per cent of their withdrawals and from 40 to 65 per cent of their retained pupils. It is evident from this that the working classes predominate in the Washington, Lincoln and West Junior School Districts. These data further support the conclusion that the socioeconomic status of the home serves as a fairly accurate barometer of the extent to which elimination or retention exists in certain communities.



TABLE XXV

Types of Residences and Home Ownership in the Four Duluth Junior High School Districts Selected for this Comparative Study of Socio-Economic Status, 1936

Junior High School District	Types of Residential Structures				Home Ownership	
	Percent	Percent	Percent	Percent	Number	Occupied by
	1 Fam.	2 Fam.	3 or More	Other Residential	Dwellings	Owners
East Jr.	92.2	3.2	0.5	4.1	5558	59.4
Washington Jr.	67.6	8.8	2.2	21.4	3397	33.3
Lincoln Jr.	68.1	14.1	1.9	15.9	1983	42.5
West Jr.	81.3	5.3	0.2	13.2	2494	52.6

TABLE XXVI

Average Monthly Rental, Age and Condition of Repair of Homes

Junior High School District	Average Monthly Rental All Dwellings	Median Year Built	Per cent of Structures Needing Major Repairs or Unfit for Use
East Jr.	\$38.76	1915-1924	7.7
Washington Jr.	19.64	1905-1914	18.4
Lincoln Jr.	16.94	1905-1914	18.0
West Jr.	18.08	1905-1914	18.4

TABLE XXVII  
Summary of Indices Used to Determine Comparative Socio-Economic Status  
of Four Duluth Junior High School Districts.

Junior High School Districts	Per cent 1 Fam. or 2 Family Dwellings	Per cent of Homes Owner- occupied	Average Monthly Rentals	Age of Dwelling	Needling Major Re- pair or En- fit for use	Com- bined En- Ranking
East Jr.	1	1	1	1.5	1.0	1
Washington Jr.	4	4	2	3.0	4.5	4
Lincoln Jr.	3	3	4	3.0	3.0	3
West Jr.	2	2	3	3.0	4.5	2

## Economic Status of School Districts

Tables XXV and XXVI furnish data regarding the status of the housing facilities of the four junior high districts. From these data it will be possible to ascertain the relation between the socio-economic status of the home and the rate of elimination. These data have been secured from the City Planning Engineer who in conjunction with the City Planning Commission made a "Real Property Inventory" as of February 1936.

From this table it is evident that the East Junior District with 92.2% one family homes and 59.4% of the homes occupied by the owners, leads the others in economic stability. Washington with almost as many homes, has only 67.6% one family residences and only 33.3% owner-occupied, which is to be expected in a down town district. Washington leads the other districts in "other residential" meaning large apartments and hotels. The Lincoln district looms up in this study as a more tenanted area than generally supposed. With 14.1% two-family residences, 15.9% apartments and hotels and only 42.5% owner-occupied, it ranks next to the Washington district. West Junior with 81.3% one family residences and 52.6% owner-occupied, presents a more stabilized district.

As the monthly rental which the family can afford, is quite indicative of the social and economic level, Table XXIV again places East Junior first of the four with an average monthly rental of \$33.76. This is almost twice as much as paid by the next highest, Washington with 19.64. In this

respect Washington rates higher than the ownership index would indicate, but this may be accounted for by the large number of apartments and the greater rental range between the highest and the lowest. Lincoln and West hold their respective places on the basis of this index.

Table XXVII combines the five indices and gives the combined rank. It was to be expected that East would lead and that Washington would rate fourth place. The surprising element of this study was the placing of Lincoln and West. It was generally accepted by the casual observer that Lincoln ranked next to East in socio-economic status, because of its compact and substantially built district. On the other hand West Junior presents a very scattered area with few congested sections, and few duplexes and apartments.

Having established the relative ranking of the four larger Junior high districts, from a socio-economic point of view it will be of interest to know whether or not withdrawal from school occurs in the same relation.

TABLE XXVIII

Number and Percentage of Pupils Who Changed Their Address During the School Year 1936-37 in Four Duluth Junior High School Districts.

School District	Total Enrollment	Number Moved	Per cent	Range
East	1184	153	12.9	4.2%--18.7%
West	978	137	14.0	11.0%--20.0%
Lincoln	844	165	19.1	10.9%--30.1%
Washington	1243	295	23.5	6.8%--48.2%

Table XXVIII furnishes data showing the number and percentage of pupils making a change in their home address during the school year 1936-37, in the four junior high school districts. This data secured from the School Census Reports of 1937 conforms with the other socio-economic indices as to the relative socio-economic status of these school districts. Washington again leads with 23.5 per cent of its school population changing its place of residence during the year. Of the eleven elementary school districts contributing to the Washington Junior High School, the lowest per cent of change was 8% and the highest was 48.2%, the latter being the Liberty School District which fringes the business area and the one in which the Washington building is located. Another factor in this large turnover is the large number of apartment houses, small hotels and duplexes in this district, all of which adapt themselves to a fluctuating population.

No doubt many of these changes took place within the same elementary or junior high school district. Table XXI shows that large numbers moved in and out of the Junior High School districts as well as in and out of the city. Changing schools usually has a retarding effect upon the school progress of a child. It is to be expected that where there is the greatest fluctuation of school population, there will be a correspondingly large number of drop-outs due to being retarded and overaged. This proves to be the case in the Washington district where the ratio of withdrawal is shown in

Table XX, is 9.65 per cent.

East Junior, ranking first in the indices of housing facilities and socio-economic status, shows the least change of residence of the four junior high school districts. This reflects itself in the school progress and in the ratio of withdrawals, both resulting factors from any form of socio-economic disturbance. West Junior and Lincoln Junior take their respective places in the order of socio-economic ranking of the four junior high school districts.

A recent study of the problem of "transiency of families" in the city of New York makes the problem in Duluth quite conservative by comparison.

"A Brooklyn school started with 1,128 on the register and ended the term in June with 1,115, but meanwhile 656 pupils had been admitted and 669 discharged. A school in Manhattan began the term with 1,864 on the register and ended the term with 1,872, but meanwhile 1,093 were admitted and 1,085 were discharged."<sup>18</sup>

#### Broken Homes and Elimination

The importance of the home as a medium for the proper growth and development of the personality of the child, is obvious. Any variation occurring in the elements constituting the normal family is very likely to affect the conditions making for proper adjustment within the home and to the world outside of it. The broken home is here defined as the home broken prematurely by death, divorce or desertion

18. Campbell, G. L., Superintendent of New York City schools, Bulletin, The New York Schools, 1937, p. 123.

of one or both of the parents, when it still included among its members children who have not yet grown to full economic and spiritual independence of their parents.

Recent studies relative to the prevalence of broken homes in the different parts of the United States, point to the fact "that the average lies somewhere between 18 and 25 per cent."<sup>19</sup> In other words, it is to be expected that on the whole one pupil out of every four or five in the public schools will be living in a broken home. "In a White House Conference survey of 13,000 junior high school pupils, one out of each four urban children lived in a broken home as compared with one out of each five children from the open country and villages."<sup>20</sup> From this, one could expect that 25 per cent of the Duluth Junior High School population lived in broken homes.

TABLE XXIX

Percentage of Pupils of Four Duluth Junior High School Districts Living in Broken Homes of the Withdrawing and Retained Groups, During 1937-38.

Withdrawals		Retained	
Boys	Girls	Boys	Girls
32.4	29.8	19.2	20.5

Table XXIX indicates that the retained pupils who had completed the 9A grade compared favorably with the nationwide study referred to by Cook, while the withdrawals exceeded the general average by 7.4 per cent for the boys and 4.8 per cent for the girls.

19. Hallenstain, L., The Personality and Character of Children of Broken Homes, Columbia Contributions to Education, 1937, p. 38.
20. Cook, L. A., Community Background of Education, McGraw Hill Company, 1938, p. 131.

Reference has frequently been made to the maladjustment resulting from the large number of sub-normal pupils in the conventional class room. While the teacher is apt to find three or four subnormals in the average heterogeneous class, she will find on the average eight or ten children from broken homes.

Because of the many social implications such as, elimination, truancy, delinquency and undesirable personality traits frequently associated with broken homes, teachers, and counselors should ascertain the home status of their pupils as early as possible. Being cognizant of the home situation they can more judiciously offer help and guidance.



TABLE XXX

Number and Percentage of Delinquent Boys and Girls in the Four Junior High School Districts of Duluth, of Ages 8 to 17 Inclusive, Covering 8 Year Period, 1928-36 Inclusive. (A)

School District	Male (B) Population	Delinquent Boys Number	Rate (C)	Female (B) Population	Delinquent Girls Number	Rate (C)
East	21,138	209	9.8	18,004	33	1.8
Lincoln	13,540	334	21.2	13,959	62	6.2
West	16,878	427	26.9	16,243	49	3.0
Washington	22,141	543	28.2	22,948	133	6.5
Totals	73,697	1,503	21.5	71,154	277	4.4

(A) Compiled by City Planning Commission.

(B) Data from Annual Census Books of Board of Education.

(C) Per 1,000 juvenile population.

TABLE XXXI

Number and Percentage of Duluth Delinquents in  
School at the Time the Offense Was Committed.  
1928-1936

Age	Number by age	Normal		Retarded		Accelerated	
		Number	Per cent	Number	Per cent	Number	Per cent
12	95	47	49.5	44	46.0	4	4.2
13	117	64	54.7	48	41.0	5	4.3
14	151	73	48.3	64	42.4	14	9.3
15	180	83	46.0	102	56.7	15	8.3
16	124	50	40.3	62	50.0	12	9.7
17	55	22	40.0	30	54.5	3	5.5
Total	722	319	44.7	350	48.4	55	6.9

TABLE XXXII

Number and Percentage of Duluth Delinquents, Out  
of School, at the Time Offense Was Committed.  
1928-1936

Age	Number by age	Normal		Retarded		Accelerated	
		Number	Per cent	Number	Per cent	Number	Per cent
12	1	0	0.0	1	100.0	0	0.0
13	6	3	50.0	3	50.0	0	0.0
14	22	11	50.0	11	50.0	0	0.0
15	83	35	42.2	46	55.4	2	2.4
16	164	24	14.6	139	84.8	1	.6
17	19	6	31.6	13	68.4	0	0.0
Total	295	79	26.8	213	72.2	3	1.0

In this study of delinquency, only boys and girls who have been brought before the Duluth Juvenile Court and whose cases appear on the court records, have been considered.

Further, none of the delinquents had reached the age of eighteen at the time the offense was committed, as cases over eighteen are beyond the jurisdiction of this court. Typical among the types of delinquency here studied are truancy, theft, incorrigibility, immorality, breaking into buildings, running away and disturbing property.

Table AXX furnished data giving the relative number of cases of delinquency in the four junior high school districts. The figures are cumulative over a period of eight years covering the years 1928-1936 inclusive. The ratio of delinquency is based upon the rate per thousand juvenile male or female population. Table AXX covers 1,503 cases of boys and girls of ages eight to seventeen.

In comparing the four areas, the East Junior District, with its high socio-economic status, has the lowest delinquency rate for both boys and girls. Aside from a few small suburbs contributing to this district, it is made up of the more substantial homes, 60 per cent of which are owner-occupied (Table XXV). The remaining 40 per cent have an average monthly rental of \$38.76 (Table XXVI). These two indices give a fairly good picture of the status of the homes of this district which might account for the low delinquency rating.

The high monthly rental (\$19.64) of the Washington District appears to be somewhat out of line with the other socio-economic indices (Table XXVI). This may be due to the fact that this area includes a large number of sizable apartment buildings of comparative high rental as well as a large number

of substantially built homes built within a walking radius of the business section of the city. While not of the "slum type" of homes, the Washington district does contain a greater number of the poorer home units than do the other three.

Two indices are obviously insufficient to determine the socio-economic status of any school district, however, the other studies in this chapter appear to be in agreement with the housing factors. As delinquency is so closely related to the home, it is the purpose of this study to find the extent to which poor housing facilities may be a contributory factor.

Washington Junior High School district fringing the main business section of the city, with a large share of the floating population of the city, and with the lowest rating in housing facilities, shows the expected high delinquency rate. Over a period of eight years, there were 543 cases of delinquent boys in this district as compared with 209 in the East Junior District. The number of girl delinquents in the Washington area was almost equal to that of the other three school districts combined. The Lincoln District shows a delinquency rate for the girls (6.2) almost equal that of Washington (6.5), (Table LXX). This would indicate that Lincoln has a delinquency pattern for girls, that is not found to the same extent at either East or West.

Table LXXI furnishes data showing the number and percentage of normal, retarded, and accelerated boy and girl delinquents who were in school at the time the offense was committed. Of the 722 delinquents in the three classifications,

319 were of normal school progress, 350 were retarded and 53 were accelerated. This does not agree with the popular belief that the delinquents are, in the main, feebleminded. Combining the accelerated (53) with the normal (319) the total will exceed that of the retarded (350).

Writers on the subject appear to be in disagreement as to the extent to which intelligence or the lack of it is a determinant in juvenile delinquency. Terman<sup>21</sup> holds that all feebleminded are potential criminals or delinquents. Baker<sup>22</sup> states that "studies made of the intelligence of delinquents indicate that the majority of them fall into the dull normal or borderline group. Only 2 per cent are above the average." Sullenger<sup>23</sup> maintains that "classification of delinquency by intelligence levels does not and never can, represent the whole personality...the forces that drive him...causations in the environment itself....It is unsafe to draw definite conclusions as to mental abnormalities being one of the primary determinants in juvenile delinquency as classified by some writers, since it is found that so many indirect factors are closely connected with them."

Table XXXII furnishes data relative to the delinquents who were out of school at the time the offense was committed. Two hundred ninety-five boys and girls composed this group of

21. Terman, L. M., "Research on the Diagnosis of Pre-delinquent Conduct", Journal of Juvenile Research, Vol. IX, 1922, pp. 124-130.
22. Baker, M. J., and Irpachgen V., The Diagnosis and Treatment of Behavior-Problem Children, The MacMillan Company, 1936, p. 248.
23. Sullenger, T. E., Social Determinants in Juvenile Delinquency, John Wiley and Sons, 1936, p. 111.

which 213 were retarded. This was almost three times as many as the normal and accelerated combined. The fact that this large number of retarded delinquents were unable to adjust themselves to life situations when out of school was perhaps due to the same reason that they were unable to get along in school. Had their difficulties been diagnosed by their teachers and the proper guidance offered while they were still in school, it is possible that some of these delinquencies might have been prevented. It was this situation that Kilpatrick had in mind when he wrote, "Teachers have a definite responsibility in the matter. If they are not informed they may ignorantly increase or may even bring on maladjustment. Or they may fail to recognize instances of maladjustment found among their pupils and so fail to secure for them proper treatment."<sup>24</sup>

For the "in school" delinquents, age 14 (Table AX.1) was the peak age in numbers for the normal and age 15 for the retarded. For the "out of school" delinquents, the normal group was comparatively small being only 79 out of a total of 295. For this group age 15 produced the greatest number. On the other hand the retarded 16 year olds made up over two thirds (139) of the total (213) for that group. From the above data, ages 14, 15 and 16 appear to produce delinquents with the greatest frequency. As the large majority of these delinquents are within the age-range of the junior high school, it appears

24. Kilpatrick, Introduction, Personality Adjustment of School Children by C. B. Zachry, 1929, p. XIII.

that the delinquency problem in Duluth, is largely a junior high school problem. Thrasher<sup>25</sup> states that frequently the career of the delinquent and the confirmed criminal begins during adolescence. The implication of this statement, coupled with the findings of this study places a heavy responsibility upon the teachers and administrators of the junior high schools. The need of trained counselors within the school, who can work with visiting teachers and a psychiatrist in the mitigation of this problem of delinquency, is very apparent. Likewise a teaching staff cognizant of the seriousness of the problem, on the alert for evidences of delinquency and schooled in the proper approach, can materially aid the guidance officers in the attack upon delinquency.

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25. Thrasher, F. M., The Gang, University of Chicago Press, 1936, p. 82.

## CHAPTER IV

### REMEDIAL CLASSES AND CASE STUDIES

#### Adjustment Classes

So far in this study, the evidence offered indicates that such factors as retardation, overageness, low mentality, poor scholarship and low socio-economic status are associated with the number of withdrawals from school. The greater the number of these factors present in a single case the greater would be the probability of withdrawal. On the other hand many pupils, handicapped by one or more of these factors, survive and continue through junior high school and frequently through senior high school. These may well be considered the exceptions. Likewise many pupils having none of these handicaps, leave school prematurely. These must also be considered exceptions. However, the results of this study would show that the above enumerated factors are indicative of withdrawal and that any one or combination of these factors coming to the attention of the counselor, should be followed by remedial effort.

Two procedures have been followed in the attempt to continue potential early-leavers in school. The first has been through individual counsel and guidance, by means of which the would-be drop-out feels that some understanding and sympathetic teacher is really trying to help him overcome his difficulties. The other procedure is through the agency of remedial classes, which will be known in this study as "adjustment classes".



These classes are designed for pupils of low mental ability, where groups of pupils who experience the same general type of handicap may work together toward the solution of their difficulties.

Pupils enrolled in the adjustment classes are usually the dull or borderline cases with intelligence quotients of 20 to 60. They have become educationally maladjusted because of their inability to meet the demands of their grade. Slow school progress has resulted in social maladjustment. Physically they have become more mature than their classmates. They have reached a period of adolescence while in a class room of pre-adolescents. In enrolling these slow backward pupils in the adjustment classes of the junior high school, an attempt has been made to effect educational and social adjustment to the end that their attitude toward school and authority may be socialized, that they may gain confidence and self respect, that they may be trained in desirable social and personal habits, and that, if and when, their school progress warrants, they may be re-enrolled in the regular classes.

The adjustment classes were first organized in two of the junior high schools of Duluth, in February 1937. The results of the semester's trial were so gratifying that the following semester the number of classes was increased to include all the larger junior high schools of the city. The general purpose of these classes has been to offer a differentiated program of studies to pupils with an intelligence quotient of 80 or less. Some of the outstanding features of the adjustment classes follow:

1. Pupils of low ability level are given an opportunity to work progressively at their own rate without the stunting sense of failure resulting from constantly being the laggards of the conventional class.

2. Working with others of approximately the same mental capacity puts them at ease mentally and emotionally and in the frame of mind where they can do their best.

3. Specially trained teachers with the right emotional make-up teach these groups in numbers not exceeding twenty, thus making it possible to give much individualized instruction.

4. The course of study is designed to equip these boys and girls for the kind of life they will be expected to live and not a course designed for those who expect to go on to higher schools.

5. By programming the special class pupil, his daily routine of classes will be identical with the regular school program, except for the differentiated curriculum in the three core subjects, English, social studies, and general mathematics. This removes the stigma of the sub-normal opportunity room of the elementary school. No reference is ever made to these classes as special classes or to the pupils as subnormals.

6. Greater emphasis is given to vocational guidance than in the regular classes where almost all the pupils go on to senior high school. These adjustment class pupils being several years retarded and overaged, leave school at an earlier grade level.

7. Removing the slower pupils from the regular classes

allows the conventional class to proceed at a more rapid rate.

8. Many of the overaged and oversized pupils from the neighboring elementary schools are advanced to these adjustment classes even though they have not fulfilled the passing requirements of the 8A grade.

9. Pupil-teacher conflict of the conventional classes has been considerably reduced. To gain his share of attention, this slow type pupil frequently assumes the role of a trouble-maker. In the adjustment class he is on a parity with the rest of the class and receives his share of attention for his own scholastic effort.

A typical adjustment class organization of the Duluth Junior High Schools is the one at Washington Junior High. There are three classes of about twenty pupils each. These pupils are scheduled in the regular home rooms, art, music, physical education, industrial education, and home economics classes. Only in the core subjects, English, social studies and general mathematics are they segregated. Pupils showing proficiency in one or two of these classes, may take these with the regular classes. These adjustment classes graded by semesters (7A English, 8B General Mathematics) are taught by three men who have had special training in one of the core subject fields and for this type of special remedial teaching. Men are preferred for these classes because most of the pupils are overaged boys and potential problems. By means of a testing program, individual records are kept of their school progress. It is the purpose of these tests to measure the school

progress of each individual from semester to semester rather than to compare his work with the others. These classes differ from the Adjustment Classes of some of the junior high schools of the City of New York. In the New York classes, pupils who have reached the age 13 before they have completed the 5B grade of the elementary school, are admitted to these adjustment classes. "These pupils are usually dullards or borderline cases, with I. Q. ranging from 60 to 90....Nearly all are delinquents and problem-behavior cases."<sup>26</sup>

For the school year 1937-1938, figures showing distribution of boys and girls in these classes indicate that 66 per cent were boys and 34 per cent were girls. While this would contradict the statement made by Douglas (page 18) that the average intelligence score for boys is several points higher than that of the girls, yet it is in agreement with his subsequent statement that girls persistently make better school progress due to the greater effort they exert.

TABLE XXXIII

Distribution of Age and Intelligence quotients of Boys and Girls in the Adjustment Classes of Four Duluth Junior High Schools, 1937-1938.

	Age		I. Q.	
	Range	Median	Range	Median
Boys	14-19	16 yrs. 1 mo.	62-80	75
Girls	14-18	16 yrs. 2 mo.	60-80	72

Data in Table XXXIII shows the median intelligence quotient for the boys to be 3 points higher than that of the girls.

<sup>26.</sup> Taylor, Albert S., "Adjustment Classes That Adjust", The Teacher, March 1938, p. 5.

girls. The median age for both the boys and girls was slightly over 16, indicating that the majority of these pupils were continuing beyond the compulsory age. In the conventional class pupils of this type welcome the relief the law affords them and at their sixteenth birthday, frequently leave school.

The holding power of these adjustment classes is indicated by the fact that only 16 per cent of the boys and 18 per cent of the girls enrolled at the beginning of the school year, had withdrawn from school. These percentages include all reasons for leaving such as illness, transfer, employment as well as dissatisfaction with school or with their school progress. The number leaving for the latter reason would probably not be greater than the ratio for the entire school.

As the problem of drop-outs has been shown to be largely a problem of the retarded and the low mentally, it reduces itself to the task of adjusting the curriculum to the ability of each individual pupil rather than trying to bring the pupils up to the regular curriculum standards. For these reasons the major emphasis in the three core subjects offered in the adjustment classes has been; general mathematics brought down to the level of these pupils dealing with every-day practical problems which they will face in the life situations their level will live, with considerable emphasis on fundamentals and business arithmetic; social studies with the emphasis on preparation for citizenship, the study of current affairs and the world today, the study of occupations and vocational

guidance. In English, emphasis has been given to the mechanics of oral English, comprehension in silent reading, letter writing, spelling, and correction of the common errors of expression. The literature has been of the same material as the regular classes but written in a lower vocabulary level.

In the attempt to justify the expense, time and effort in organizing these remedial classes, two approaches to the answer may be offered. In answer to the question whether these slow pupils are educable, Hutchins writes the following:

"I suspect that the number of children who are actually ineducable is far smaller than we have supposed. We may be guilty of accusing children of intellectual deficiency as an excuse for our failure to educate them properly. It is easier for a teacher to say of a boy 'he is no good' than to say of himself 'I don't know how to teach'. . . Education's first problem is to find out how to teach every boy to read and write. We cannot dodge this responsibility without bringing our sins down on our own heads. For the children who cannot, under our present system, get something out of our schools, are likely to become the truants, the delinquents and the young criminals."<sup>27</sup>

To the question, can the cost of this special education be justified, the following answer is advanced: The State requires all pupils to attend school until their sixteenth birthday (unless legally excused). Dismissing them before that age would be not only against the tenets of democracy but illegal. Not only would the Compulsory Attendance Laws be affected, but in the event he should find employment, the child labor laws would be set in motion against him. As the

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27. Hutchins, Robert M., "What Can We Do About It", Saturday Evening Post, February 19, 1938, p. 73.

schools cannot be considered as mere retention institutions for the holding of these mentally retarded until they reach a certain age, it becomes incumbent upon the state to give these pupils an educational program by which they can profit.

This study would tend to show that the regular curriculum is unsuited to this group, producing, in many cases, repeated failures, retardation, overage, discouragement, truancy, drop-outs, and delinquency. In all cases the regular course does not meet the needs of this special group to the extent that the training they have received, have brought out even their limited potentialities. It is evident, therefore, that if the state is to give equality of educational opportunity to all of its people, it must give this group a specialized curriculum commensurate with its mental capacity to progress.

#### Case Studies

In the case studies that follow, it has not been the purpose of the author to give a mere compilation of statistical data, but to give only such pertinent data that will complete the picture of the educational progress and the social adjustment of each case, to show some of the methods used and results obtained that may not be measurable by existing measuring devices, and to show wherein the adjustment classes have met the individual needs.

Gordon S.      C. A. 16 3/4

I. Q. 80

Grade 7A

Gordon is an orphan, now living with an appointed guard-

ian. The fact that he was sixteen at the opening of school last fall is an indication that he feels that continuation in school will better equip him for life. Handicapped by having been "farmed out" to several homes and not having a normal family development, he had acquired a feeling of inferiority which, coupled with his slow learning ability, found him on the defensive when first entering the adjustment class. When he found that his teachers were genuinely interested in his progress and that his work compared favorably with others in his classes his attitude has changed to one completely satisfied and adjusted. His progress is indicated by his gain of one year in reading and one and one half years in arithmetic, in a period of one semester. Being satisfied and socially adjusted has helped this boy of low mental ability to make this progress.

Joseph F. C. A. 16½

I. Q. 79

Grade 7A

Joseph comes from a broken home. His father is dead and recently his mother was divorced from her second husband. Coming from an opportunity room in one of the elementary schools he had his mind set on dropping out as soon as he became sixteen. Being a very large boy he would have felt conspicuous in a regular class of normal 7B's. In the adjustment class he found himself with several others of equal size, which helped to set him at ease. Joseph rated 5A in English, 6B in social studies, and 7A in general mathematics.



as measured by the Stanford Achievement Test. His proficiency in mathematics will enable him to enroll in the regular 8B class next fall. That he is definitely "hand-minded" is indicated by his A marks in his shop subjects and his interest in things mechanical. His ambition is to become an aviation mechanic. Joseph has a deep bass singing voice which won him considerable praise in one of the school programs in which he participated. This together with his performances on the tumbling team, has placed him in the limelight among his schoolmates. Because he is making real progress in his school work and adjusting himself socially, he intends to return to school again next fall.

Marguerite P. C. A. 17½

I. Q. 66

Grade 9A

To all outward appearances, Marguerite seems an average pupil. Her fine appearance and pleasant manner have a deceiving effect in regard to her scholastic rating. Her low intelligence quotient appears to be out of line with her general behavior. Her mother recognizes the fact that Marguerite learns very slowly and attributes this lack of ability to brain fever in her childhood. When first entering the adjustment class three semesters ago, her distraught mental and emotional condition was revealed in the following comment, "I know I am dumb. I'll never get any place in school so I don't care." A marked change has taken place since then. Unaware of Marguerite's low mental rating, the office secretary arranged to give her some work in the office one per-

lod each day. Her duties here included answering telephone calls, meeting the public, filing and other routine office work. In all of these duties she performed about as well as the other girls doing the same work at other periods of the day. In her school work she took a genuine interest and made a determined effort to get every assignment. As a result of this renewed interest, she has gained, during the past year, two years in English (motivated perhaps by a desire to do office work) and has been making good progress in her other classes. Her achievement tests rate her as 7B in English, 6A in social studies and 6B in general mathematics. Outstanding in the progress of this girl is her rapid rise from the handicapped submerged type to one who capitalizes on the assets she does possess and takes a sensible attitude toward her shortcomings.

Richard S.      C. A. 15  
                     I. Q. 80  
                     Grade 8B-8A

Richard comes from a broken home, his mother having left the family of two boys in care of the father. The father works long hours in a shoe-shining parlor earning about \$50 per month. With this meagre wage he tries to maintain a one room apartment in the down town area. With this inadequate home life, undernourished, and in abject poverty, with the down town streets his only playground, without parental supervision due to the late hours the father works, it was not surprising that the boy resorted to petty thievery on a large

scale to acquire spending money and some of the necessities of life. Being placed on probation, the Court and the probation officers working with the school authorities to better his home life, school and leisure time activities, there is hope that Richard may develop into a worthwhile citizen. His progress during the year in the adjustment class has not been satisfactory. Having lived a "hounded life" he has been suspicious of those who have tried to help him including his adjustment class teachers. In that frame of mind, together with an undernourished body, he has not responded to the instruction offered. Achievement tests show no gain in social studies or mathematics, but a slight gain in reading ability (probably due to his constant reading of cheap magazines). Some improvement, of late, has been made in the attitude toward his teachers. If this continues, he may be brought out of his lethargy and make the progress of which he is capable. One outcome of this case study is evident. Had Richard been routed in the regular classes without the watchful and sympathetic guidance of the adjustment class teachers, there is no doubt but that he would have been a truant, a serious discipline problem, broken his parole and far on his way in a career of crime. What has not been accomplished in academic progress, has been achieved in his improved social adjustment.

Mary M. C. A. 16 3/4

I. Q. 75

Grade 8B

Mary comes from a broken home with six brothers and

sisters. She came to Duluth from a farm home and has been working for her board and room. With the additional help she has been able to get through a Lutheran Agency, she has been able to continue her schooling. Having lived in a number of homes in the past few years, and because of her difficult farm home background, she has little judgment as to social adequacy. Her teacher speaks of Mary as a "very stubborn girl." These unfortunate traits are somewhat offset, however, by her wholesome character, and her interest in church activities.

Mary's greatest improvement has been in arithmetic and English, after their value had been proven a requisite for good housekeeping. Being an attractive looking girl and definitely interested in the home, she should make a good housemaid. Her greatest need of adjustment is social. Having gone almost a year beyond the compulsory attendance age, it is very likely that she will continue another year. With special emphasis and guidance on her social maladjustments, she should leave school better equipped to face life than before she entered the special class.

Norman S. C. A. 17

I. Q. 71

Grade 8A

Norman is one of those unfortunate individuals who has been doubly handicapped since birth. Besides having an inferior mental ability, he has a very decided speech defect. Whether his low I. Q. has been influenced by his stuttering handicap is questionable. He has been given remedial speech

instruction, but has not taken this very seriously, preferring to let nature take its course. While he has gained one year and two months in reading, one year and seven months in mathematics, and has made normal progress in his social studies, yet without hope of improvement in his speech, the future does not hold much for this boy.

Norman belongs to that type of boys whose social ideas and interests lead them to congregate on the street corners and associate with boys older than themselves. Here, because of inferior mentality, social maladjustment and sometimes economic want, they often become the "dupes and tools of the unscrupulous" and thus become a social menace. To the counselor, he presents the most difficult challenge of any in the adjustment classes. His defective speech coupled with his low mentality virtually deprives him of a fighting chance in a competitive world.

Lois L. C. A. 16½

I. Q. 80

Grade 7B

Lois entered the adjustment classes from an opportunity room in the elementary school, where the school routine was limited to one room. At first she was extremely sensitive and found it very difficult to adjust herself to the new routine. She comes from a broken home, her father being dead, yet the socio-economic status of the home appears to be of a fairly high level. She has a sister a year older who is this year graduating from senior high school. This vivid contrast between the two girls has made Lois' maladjustment more acute.

After the first month of school, Lois seemed to improve in her school adjustment. Her confidence was restored after having been chosen to carry out several projects by the art activities group. Because of her progress in English she was placed in the regular class where she has been doing average work. In her adjustment group she led in logical and constructive thinking. She is taking eighth grade sewing and is doing A work. She plans to be a dress designer. Her aptitude for this vocation is evidenced by her A's in art and dressmaking. Lois has a very fine personality and has won many friends in the school. Her scholastic progress as well as her social adjustment during the year has been better than the average for her group.

William R. C. A. 16

I. Q. 79

Grade 8A-9B

William comes from a good home with parents above the average in cultural and economic levels. As a result of a conference with his mother at the beginning of the school year, it was revealed that "William was a very unhappy boy, that he disliked school, that he was frequently truant, that he had acquired the smoking habit, and that he was turning out to be a 'tough guy'".

After two months in the adjustment class, the mother called at the school informing the teacher that William had quit smoking, thanks to the instruction in the general science class that since giving him a new suit of clothes, he had shed his "tough guy" attitude and was acquiring the habits of a gentle-

man, that he was eager to complete the junior high as soon as he could and then go on to senior high. His attendance report is very good and his conduct mark is A. Achievement tests show that he has made real progress in reading and English which had a bouyant effect upon all of his studies. He was recently elected by his hom. room to serve as a news reporter which is indicative of his social standing with his fellow students. He is definitely good looking, cheerful and happy and is now industriously competing with the average pupil in life situations.

Joseph V. C. A. 15 3/4

I. A. 69

Grade 7B

Joseph entered the adjustment class from the elementary school with a bad record as a truant and discipline problem. Finding himself with older and larger pupils and working at a level where he could experience the satisfaction coming from doing his school work as well as the rest of his class, his attitude and behavior changed completely. From the sullen and surly problem boy of the elementary school, he has changed to a contented and happy lad anxious to please others and eager to get all he could out of school.

Coming from a family of seven children with the father dead, Joseph has had to help support the family. This he has done by selling newspapers at street corners to which task he has applied himself with unusual dexterity and considerable success, indicating that there are some traits of business acumen which tests, as now used, have not been able to measure.

If Joseph can continue his present rate of progress, to develop his social qualities and commercial abilities, he will be able to make a fair living in the years to come, in spite of his low I. Q.

Kenneth K. C. A. 18½

I. Q. 82

Grade 9A

Kenneth lives with his parents on a small garden plot on the outskirts of the city. He has two sisters, one age 14 in the 8B grade, the other age 12 in the 8B grade, the younger girl having been doubly promoted in the sixth grade.

Kenneth being three and a half years over age, very short and stout of stature had an increasingly hard time adjusting himself as he advanced up the grades in the junior high school. Upon reaching the 9B grade his work became more difficult, with the result that his first report card showed several failing marks. Discouraged, he decided to leave school. Being advised of this, the home room teacher reported the matter to the principal with the recommendation that a boy with such fine habits, even though slow in his scholastic efforts, could still profit much from continuance in school.

The conference resulted in the boy's decision to remain. A change in his program of studies, more to his liking and ability, now finds the boy doing passing work. The realization that his teachers have taken an interest in him, has quickened his pride and self respect. Being given part time student N. Y. A. work has relieved him of feeling that he should be at



work helping support the family. Upon finishing the 9A he expects to enter senior high, selecting the subjects that will be of most value to him in his chosen vocation, agriculture.

James Mc. C. A. 15½

I.Q. 87

Grade 8B

James comes from a comparatively good home with parents above the average in the socio-economic and cultural levels. From the time James was in the kindergarten, he had been habitually truant. On his way to school some playful dog might attract his fancy with the result that James would not appear at school that day or for several days until someone prodded him along. Whipping or other forms of punishment had no effect. His whims were paramount. This continued for several years.

Because of his frequent absence from school and his indifference to school work, he became several grades retarded. He had been shuffled from the public school to the parochial school and back again as parents and teachers desperately sought to find situations that might interest the boy. When the boy had finally reached the sixth grade, he had grown to be of considerable size and was definitely out of line with the other average sixth graders. While he continued to skip school at intervals, his activities now ran afoul of the law and he was placed on probation.

The mother indistraction came to the principal of the junior high school for advice and guidance. As a result of

this conference the boy was tested and on the basis of his intelligence score, was advanced to the 7B grade, giving him an opportunity to work on the junior high school level and with boys and girls of his age and size. Under the guidance of an understanding home room teacher, he has readjusted himself, become interested in the activities of the school, brought his school work up to the level of his ability and from all indications will continue on through junior high school.

Jack C. C. A. 16

I. Q. 73

Grade 7A-8B

According to normal school progress, Jack is three years retarded. That he has found his academic work in the regular classes difficult is evident by his repeated failures. In the shop subjects he was classified as 8A, and in these "hand minded" subjects his records show very good marks. His high physical coordination is also revealed in his athletic activities. "His world revolves around sports. He has played on the basketball and baseball teams as well as having participated in several swimming tournaments. He wants to finish high school and go on to college, an aspiration he probably will never attain, with the hope that he can play on college athletic teams. Athletics being his center of interest, has given his adjustment teachers potent motivation.

Whereas he reads well and extensively, his English rating is only 7A, his social studies 7B and his general mathematics 7B. With these grade levels for a boy who should have been in the 10A or 11B, the regular curriculum offerings would be too far beyond him to be of much value. Jack adjusts himself quite well socially. He angers quickly but he also forgets as quickly. If his school work becomes difficult he gives up easily, but is willing to try if given help and encouragement. For this boy the adjustment classes have improved his personal habits, his social attitudes and have kept him in a frame of mind whereby he has been able to make greater scholastic progress than he could have in the regular classes.

These case studies do not attempt to conform to the accepted technique in case studies as set forth by such authorities as Smithies<sup>28</sup> or Zachry.<sup>29</sup> Rather the purpose has been to illustrate by means of individual cases, the approach, method and results, of the remedial efforts made to assist the less mentally endowed to adjust themselves academically, emotionally and socially; to prevent, if possible, his withdrawal from school until he has acquired at least some of the minimum essentials or until he has found employment. That the remedial effort of the adjustment classes have been somewhat successful is attested by the sampling illustrated in these case studies.

28. Smithies, E. M., Case Studies in Normal Adolescent Girls, D. Appleton and Co., 1933, p. 200.
29. Zachry, C. B., Personality Adjustments of School Children, 1929, p. 5.

## CHAPTER V

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Summary

The following facts have been brought out in this study of two groups of junior high school students, one withdrawing from school, the other retained in school:

1. One fifteenth of the total junior high school enrollment of the four schools studied, dropped out during the school year 1937-1938.
2. More boys than girls drop-out, although the difference in the number appears to be less each year.
3. Boys appeared to be consistently more retarded than the girls in each of the three grades, VII, VIII, and IX. Of the 271 withdrawing pupils, 87.5 per cent of the boys were retarded and 89 per cent of the girls.
4. Of the 400 retained pupils who were about to graduate from the 9A class, only 33 per cent were retarded.
5. Forty-four per cent of the boys and 42 per cent of the girls withdrew from school at the age 16. This age appeared to be the greatest determining factor of withdrawal, irrespective of the grade in which the pupil happened to be at the time he or she reached his or her sixteenth birthday.
6. The ninth grade appeared to be the point of departure for the greatest number. Sixty-two per cent of the pupils left school while enrolled in this grade. Most pupils who were retarded one year or more, would have reached their six-

teenth birthday during the ninth grade.

7. Of the withdrawing pupils, 53 per cent had an intelligence quotient below 90 as measured by the Kuhlmann-Anderson Group Intelligence Tests. For the retained group, only 15.5 per cent were below 90.

8. In scholastic ratings, the withdrawing group had 70 per cent below C average and only 2.5 per cent above C. On the other hand the retained group had only 20.25 per cent below the general average C and 33.75 per cent above C.

9. While absence from school during the year of withdrawal varied from 0 to over 40 days, 64.5 per cent of the cases were found within the range 11 to 30 days.

10. Contrary to the general belief, the conduct ratings of the withdrawing boys and girls, were only slightly lower than the retained pupils.

11. Thirty-one per cent of the withdrawing pupils lived in broken homes, as compared with 19.8 per cent of the retained.

12. Of the causes over which the schools may have had some measure of control, 18.8 per cent withdrew because of lack of interest, 14.8 per cent because of employment.

13. Using a five point classification of occupations, it was found that none of the withdrawing pupils had fathers whose occupation could have been classified in the two highest, while 20.8 per cent of the retained pupils had fathers whose occupations were classified in these two highest. In the two lower classes, 86 per cent of the withdrawing group had fathers

whose occupations were classified as skilled or unskilled labor as compared with 55.2 per cent of the retained group.

14. Percentage of withdrawals for the four junior high schools studied, for the school year 1937-1938, placed Washington highest with 9.65 per cent followed by Lincoln with 6.28 per cent, East with 4.56 per cent and West with 4.49 per cent.

15. In comparing the four junior high schools as to socio-economic factors affecting withdrawal or retention, the following findings were brought out:

A. Occupations: East Junior had 37 per cent of its retained group in the two highest occupational classifications compared with 28 per cent for the other three schools combined. In the withdrawing group none of the pupils were placed in the two upper brackets. In the two lowest classes of occupations, for the retained group, East had 40 per cent, West 60 per cent, Washington 66 per cent and Lincoln 83 per cent. For the withdrawals in the two lowest classes of occupations, East had 74.2 per cent, Lincoln 84.9 per cent, West 85.8 per cent, and Washington 89.6 per cent.

B. Housing facilities: East Junior District contained 92.2 per cent one family homes and 59.4 per cent owner occupied homes as compared with the Washington District having 67.6 per cent one family homes and 33.3 per cent owner occupied. As to monthly rental, the average for the East Junior District was \$38.76 as compared with \$16.94 for the Lincoln District.

C. Transiency: Changes of address occurred with the greatest frequency in the Washington District, with 23.5 per cent of the families having moved during the year 1936-1937. In the more stable East Junior District only 13.6 per cent of the families had moved.

D. Delinquency: The Washington area had 543 boys and 133 girls brought before the Juvenile Court over the eight year period, as compared with East Junior area which produced only 209 boy and 32 girl delinquents over the same period of time.

E. In the summary of the socio-economic indices, East Junior ranks the highest followed in order by West, Lincoln and Washington.

16. Adjustment classes, designed to meet the individual needs of the low mentally and retarded pupils, retained 83 per cent of the number enrolled during the school year 1937-1938. The median age for the group was 16 years one and one half months.

17. Data from the complete study, would describe the typical drop-out as a boy or girl, 16 years of age, retarded two years, having an I. Q. below 90, a scholastic mark D-, who had been absent 25.5 days, living in the down town area, in a broken home, paying a monthly rental of \$18.22, and whose father's occupation would be classified as laborer.

## Recommendations and Conclusions

1. The purpose of this thesis has been to analyse the factors that are associated with elimination from the four selected and representative junior high schools of Duluth and from the findings to propose remedies. It is obvious that the aim of every school administrator should be to serve the maximum number of children of the community. "For every child an education, which through the discovery and development of his individual abilities prepares him for life, and through training and vocational guidance prepares him for a living which will yield him the maximum of satisfaction."<sup>30</sup>

2. That the holding power of the junior high schools can be further increased is evident from the gain (62 pupils, 1.43 per cent) made during the school year 1937-1938, over the preceding year. This increase in the holding power has been due to a concerted effort on the part of the administration and teaching force. A better understanding of the predictive evidences of withdrawal and a conscientious effort to make the necessary adjustments will, no doubt, further increase the holding power.

3. An analysis of the reasons offered by the pupils for leaving school, leads one to the conclusion that, in many cases, the reasons were superficial, mere cloaks to cover the real reason. Out of the 145 cases where the reason for leaving

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30. "The Children's Charter," Article X, White House Conference.



ing may be questioned, such as lack of interest, employment, and home conditions, some form of maladjustment to the school curriculum or to the school life, would, in the estimation of the writer, more nearly represent the actual situation. If the actual causes of these unadjustments could be ascertained sufficiently early, accompanied with the proper guidance and remedial effort, many of those who now leave with resentment toward school and society and insufficiently prepared for life could be salvaged.

4. Repeated failure in the upper grades of the elementary school is a questionable procedure. While standards must be maintained, yet in many cases the damage done to the pupil's personality, by repeated failure, often exceeds the added content or skills acquired. The old adage "nothing succeeds like success," may also be true of its converse, "nothing fails like failure." The needs of these repeated failures, who become over-aged and over sized for their grade, should be met by specially organized adjustment classes in the junior high school.

5. The greater holding power of the junior high school upon the girls than the boys may be due, in part, to a faulty organization procedure. While the organization and the philosophy of the public schools has been formulated by men, they have been carried out chiefly by women. In most schools including the secondary schools, the great majority of the teachers are women. That more men are needed in the junior

high schools is obvious, when one considers that half of the junior high school population is made up of boys of the early adolescent age. The rapid physical, emotional and spiritual changes, the masculine nature trying to assert itself, are characteristics that call for a teaching force, half of whom should be men.

6. Cognizance must be given to the fact that there are many pupils who will leave school as soon as the law will allow them, in spite of what the school has to offer. For these pupils guidance in vocational choices and the need of vocational information is of utmost importance. Cooperation between the home and the school, by means of home visitations by the visiting teacher or counselor would do much in removing parental indifference and ignorance as to vocational requirements of today. Many parents are still of the opinion that inasmuch as they were able to get employment without very much educational preparation, that their children should also. Such illusions can be dispelled by vocational guidance in school and home visitation.

7. As the industrial classes of the junior high school are merely exploratory in nature, the vocational Smith-Hughes Trade classes furnish strong incentives to boys to complete the Junior High school, so that they may enter one of the 12 vocational courses now offered in the senior high schools. Belkema,<sup>31</sup> in establishing the trade classes, maintained that

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31. Belkema, H. H., Superintendent, Special Report to the Duluth Board of Education, March 20, 1900. Unpublished.

one of the outcomes would be increased holding power of the secondary schools upon the boys. The decrease (61 boys, 2.45%) in the annual number of drop-outs for boys during the year 1937-1938 over the previous year, may have been due in part, to the increased motivation offered by these trade classes. The obvious implication from this would be an increase in the number and variety of Trade Classes as rapidly as the building facilities will permit.

8. That there should be cumulative information in regard to every pupil, is apparent to all who are working in the field of guidance. Personnel files or folders containing case records and accumulated pertinent data, should be started in the elementary school and follow the pupil grade by grade through the elementary school, junior and senior high school. Only with the aid of such information can guidance be offered properly.

9. Perhaps in no other unit of the public school system, can an extra curricular activity program be as effective as in the junior high school. The strong emotional and social appeal, the opportunities for exploration of talent for the young adolescents who are trying to find themselves, the strong motivation given curricular subjects, all speak eloquently for the place of extra curricular activities in the junior high school. Not to have a well rounded program of extra-class activities in a junior high school, is to deprive children of that expressive age, of some of the most important benefits of this school unit.

10. The adjustment class is the Junior High School's contribution toward the solution of the problem of retardation, over-ageness, oversized, and the borderline pupils. The case studies offered, amply illustrate the success in educational and social adjustment made during the year 1937-1938. As a part of every junior high school, there should be a sufficient number of adjustment classes, that will not only accommodate the retarded within its own building, but also the retarded in the neighboring elementary schools, who have reached adolescent maturity while still in the fifth and sixth grades.

11. That Duluth should have a Psychiatric Clinic for the systematic and the scientific treatment of its neurotic and psychotic behavior cases, is a fact well known to the school authorities, the social agencies and the Juvenile Court. The need and the purposes for which such a clinic could be used, has frequently been discussed privately and publicly. What is needed is someone who can see through the fog of financial and political entanglements, envisage a set-up that can serve the three groups efficiently, and the necessary courage to convince the Board of Education and the City Council of its need. A psychiatrist assisted by a visiting teacher for each of the senior high school districts, would make a satisfactory nucleus for a beginning. The visiting teacher would serve the area of the senior high school district, including the junior high schools and the elementary schools, in addition to the needs of the senior high school.

with a clinic of even this size, the good that could be accomplished in neurotic and emotional adjustments and in the prevention of delinquency (if it were measurable) would, in the estimation of the writer, far exceed the financial cost to the city.

12. The limitations of the thesis preclude a study of drop-outs in the Senior High School. It would be of considerable interest and enlightenment to have a companion study made of the drop-outs of the Senior High Schools of Duluth. No doubt the same causes that prevail in the junior high school, also eliminate pupils from the senior high school. Likewise the reasons offered for holding pupils in the junior high school, apply with equal force to the students of the senior high school. That the secondary schools must continue to adapt their curriculums to the needs of the 80 to 90 per cent of its students who do not go to college, as well as those who go to higher schools of learning, is becoming more and more obvious. Only when this is done will the high schools be going as far in meeting the vocational needs of those who are going to be the manual workers, as the high school now does in meeting the needs of those who enter the professions and the so-called white collar positions.

## APPENDIX

-55-

Report on Drop-outs.

Name \_\_\_\_\_ Grade \_\_\_\_\_

Address \_\_\_\_\_

Date entered \_\_\_\_\_ Date dropped out \_\_\_\_\_

Age \_\_\_\_\_ I. Q. \_\_\_\_\_ Teachers mark \_\_\_\_\_

Days absent \_\_\_\_\_ Conduct mark \_\_\_\_\_

Nationality of Father \_\_\_\_\_ Mother \_\_\_\_\_

Occupation of Father \_\_\_\_\_ Mother \_\_\_\_\_

\* Reasons for drop-out:

\* If pupil is still in school but shows evidences of dropping out, please use this form giving "evidences" instead of "reasons."

## Bibliography

1. Fringle, R. W., The Junior High School, McGraw Hill, 1937, p. 3.
2. Frank Bunker, The Junior High School Movement, 1935, p. 236 F. W. Roberts Company
3. Koos, L. V., The Junior High School, Ginn and Co., 1927, p. 17.
4. Ibid., p. 18.
5. Report of the Superintendent of Schools to the Duluth Board of Education, Dec. 22, 1936. A Study of Junior High School Enrollments, p. 4. Unpublished.
6. Letter from the Office of the Minneapolis Superintendent of Schools, March 15, 1938.
7. Fringle, Op. cit., p. 36.
8. Brooks, Fowler D., The Psychology of Adolescence, The Houghton Mifflin Co., 1929, p. 550.
9. Douglas, A. A., Secondary Education, The Houghton Mifflin Co., 1927, p. 248.
10. Brooks, Op. cit., p. 9.
11. Brooks, Op. cit., p. 9.
12. Robbins, C. L., The School as a Social Institution, Allyn and Bacon Co., 1918, p. 94.
13. Douglass, H. R., and Wind, Kate, "Factors Related to Withdrawals from Junior High Schools in Minneapolis," in Elementary School Journal, Jan. 1937, p. 379
14. Collins, J. H., "Home Status and Success in School." Elementary School Journal, October 1937, p. 110.
15. Sims, V. M., The Measure of Socio-Economic Status, Public School Publishing Company, 1928, p. 9.
16. Collins, Op. Cit., p. 110
17. Sims, Op. cit., p. 9.
18. Campbell, H. G., Superintendent of New York City Schools, Bulletin, The New York Schools, 1937, p. 123.



19. Wallenstein, N., The Personality and Character of Children of Broken Homes, Columbia Contributions, 1937, p. 33.
20. Cook, L. A., Community Backgrounds of Education, McGraw Hill Co., 1935, p. 131.
21. Terman, L. M., "Research on the Diagnosis of Pre-delinquent Conduct," Journal of Juvenile Research, Vol. 12, 1922, pp. 124-130.
22. Baker, M. J., and Traphagen, V., The Diagnosis and Treatment of Behavior-Problem Children, Macmillan Company, 1936, p. 248.
23. Sullenger, T. E., Social Determinants in Juvenile Delinquency, John Wiley & Sons, 1936, p. 111.
24. Kilpatrick, Introduction, Personality Adjustment of School Children, by C. B. Zachry, 1929, p. XIII.
25. Thrasher, F. M., The Gang, University of Chicago Press, 1936, p. 82.
26. Taylor, A. S., "Adjustment Classes That Adjust," The Teacher, New York, March 1938, p. 5.
27. Hutchins, R. M., "What Can We Do About It," Saturday Evening Post, February 19, 1938, p. 73.
28. Smithies, M. M., Case Studies in Normal Adolescent Girls, D. Appleton Co., 1933, p. 200.
29. Zachry, C. B., Personality Adjustments of School Children, 1929, p. 5.
30. "The Children's Charter" Article A, White House Conference.
31. Melkema, H. H., Superintendent, Special Report to the Duluth Board of Education, March 30, 1938. Unpublished.